



ssi

1978-1980 CATALOG

DR. ROBERT P. MARKMAN
DEPT. OF SOCIAL SCIENCES



Gilbs Ann 689

1978

June

S	M	T	W	T	F	S
	1	2	3			
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

July

S	M	T	W	T	F	S
	1					
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August

S	M	T	W	T	F	S
	1					
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
20	21	22	23	24	25	26
27	28	29	30	31		

September

S	M	T	W	T	F	S
	1					
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

October

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November

S	M	T	W	T	F	S
	1	2	3	4	5	6
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

December

S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1979

January

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February

S	M	T	W	T	F	S
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

March

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

April

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

May

S	M	T	W	T	F	S
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

COLLEGE CALENDAR

1978 — 1980

Summer Session 1978

June 1	.....	Evening Registration
June 2	.....	Day Registration
June 5	.....	Classes Begin
June 9	.....	Last Day for Class Changes & Late Registration
June 20	.....	Withdrawal After This Date No Refund of Fees
July 4	.....	4th of July Holiday
July 14	.....	Last Day to Drop Courses with a "W"
July 28	.....	Summer Session Ends

First Semester 1978-1979

August 23	.....	Faculty Study Conference
August 24-25	.....	Day Registration
August 24	.....	Evening Registration
August 28	.....	Classes Begin
September 1	.....	Last Day for Class Changes
September 4	.....	Dismissal for Labor Day
September 29	.....	Withdrawal After This Date
		No Refund of Fees
October 20	.....	Mid-Semester (D&F Grades are Due Friday October 20 by 5:00 p.m.)
November 13	.....	Dismissal for Veteran's Day
November 17-18	.....	Forensic Tournament (No Classes 1:00-5:00 p.m.)
November 22	.....	Last Day to Drop Courses with "W"
November 22	.....	Dismissal for Thanksgiving (After Last Class, Day & Evening)
November 27	.....	Classes Resume
December 20	.....	End of First Semester

Second Semester 1978-1979

January 15	.....	Faculty Conference
January 16-17	.....	Day Registration
January 16	.....	Evening Registration
January 18	.....	Classes Begin
January 24	.....	Last Day for Class Changes
February 20	.....	Withdrawal After this Date No Refund of Fees
February 22	.....	Washington's Birthday Holiday
March 16	.....	Mid-Semester (D&F Grades are Due Friday, March 16 by 5:00 p.m.)
April 7-16	.....	Spring Break
April 18	.....	Last Day to Drop Courses with "W"
May 16	.....	Classes End
May 18	.....	Commencement (7:00 p.m.)
		End of Semester

June

S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

July

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

August

S	M	T	W	T	F	S
2	3	4	5	6	7	8
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

September

S	M	T	W	T	F	S
1	2	3	4	5	6	7
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

October

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

November

S	M	T	W	T	F	S
1	2	3	4	5	6	7
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

December

S	M	T	W	T	F	S
1	2	3	4	5	6	7
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1980**January**

S	M	T	W	T	F	S
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

February

S	M	T	W	T	F	S
1	2	3	4	5	6	7
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

March

S	M	T	W	T	F	S
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

April

S	M	T	W	T	F	S
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

May

S	M	T	W	T	F	S
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Summer Session 1979

May 31	Evening Registration
June 1	Day Registration
June 4	Classes Begin
June 8	Last Day for Class Changes & Late Registration
June 19	Withdrawal After this Date No Refund of Fees
July 4	4th of July Holiday
July 13	Last Day to Drop Courses with a "W"
July 27	Summer Session Ends

First Semester 1979-1980

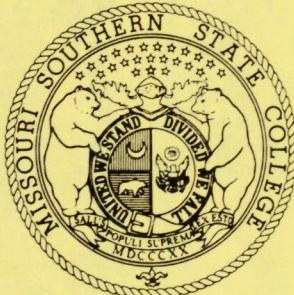
August 22	Faculty Study Conference
August 23-24	Day Registration
August 23	Evening Registration
August 27	Classes Begin
August 31	Last Day for Class Changes
September 3	Dismissal for Labor Day
September 28	Withdrawal After this Date No Refund of Fees
October 19	Mid-Semester (D&F) Grades are Due Friday, October 19 by 5:00 p.m.)
November 12	Dismissal for Veteran's Day
November 16-17	Forensic Tournament (No Classes 1:00-5:00 p.m.)
November 21	Last Day to Drop Courses with "W"
November 21	Dismissal for Thanksgiving (After Last Class, Day & Evening)
November 26	Classes Resumes
December 19	End of First Semester

Second Semester 1979-1980

January 14	Faculty Conference
January 15-16	Day Registration
January 15	Evening Registration
January 17	Classes Begin
January 23	Last Day for Class Changes
February 19	Withdrawal After this Date No Refund of Fees
February 22	Washington's Birthday Holiday
March 14	Mid-Semester (D&F) Grades are Due Friday, March 14, by 5:00 p.m.)
March 31-April 4	Spring Break
April 14	Last Day to Drop Courses with "W"
May 14	Classes End
May 16	Commencement (7:00 p.m.) End of Semester

Missouri Southern State College

JOPLIN, MISSOURI



OFFERING BACCALAUREATE
AND ASSOCIATE DEGREES

**CATALOG OF
General Information and
Announcement of Courses
1978 — 1980**

FOREWORD

This catalog presents general information, requirements for admission and graduation, and course offerings for the academic years of 1978-80, beginning June 1, 1978. The register of administrative officers and instructors is for the 1977-78 year. The College reserves the right to amend regulations and change fees when necessary.

EQUALITY OF OPPORTUNITY

Missouri Southern State College does not discriminate on the basis of sex, race, creed, color, national origin, or the handicapped in the education programs or activities which it operates. The College strives to build a community in which opportunity is equalized and to use its facilities and resources to develop the skills of the members of all groups so they may play responsible and productive roles in society. This policy is relevant to all of the College's services and facilities which are available to every student enrolled.

The College adheres to the requirements of the Civil Rights Act of 1964, Equal Opportunity Act of 1972, Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1973, and the Governor's Executive Order of 1973. In October 1973 the Board of Regents established an Affirmative Action Committee and in the Fall semester of 1975 a Title IX Officer was designated to assure the enforcement of equal opportunity policies and affirmative action and to avoid or eliminate discriminatory practices.

DIRECTORY INFORMATION

The following paragraph is taken from a letter written by the Executive Department, United States Government, April 15, 1975 to institutions of higher education:

"1. EDUCATION RECORDS: Public Law 93-568 amends Public Law 93-380 (General Education Provisions Act) and permits schools to maintain directory information concerning students. Only after the school has given public notice that directory information will be released on students are schools permitted to do so. This information would consist of such data as the student's name, address, date and place of birth, major field of study, dates of attendance, degrees and awards received, and the most recent previous educational agency or institution attended. Directory information may be released by the school without an educational release statement, unless . . . the student has informed the school that such information may not be released . . . without his . . . prior consent . . ."

Missouri Southern State College will include the following as "Directory" information:

Student's Name
Address
Telephone Number
Date & Place of Birth
Next of Kin or Spouse (Emergency Only)
Major Field of Study
Dates of Attendance
Degrees and Awards Received
Most Recent Previous Educational Agency or Institution Attended

CORRESPONDENCE DIRECTORY

MISSOURI SOUTHERN STATE COLLEGE

JOPLIN, MISSOURI 64801

Telephone: Area 417 624-8100

Admission of students	Director of Admissions
Alumni affairs	Director of Alumni Affairs
Athletic activities	Director of Athletics
Business affairs and purchases	Director of Financial Affairs
Catalog and bulletins	Director of Admissions
Credit evaluation and transcripts	Registrar
Employment, on campus (Student part-time)	Office of Financial Aids
Evening session	Coordinator of Evening Session
Faculty appointments	Vice President for Academic Affairs
Financial aids	Office of Financial Aids
Gifts and annuities	President
Housing	Director of Housing
Loans	Office of Financial Aids
Orientation	Dean of Men, Dean of Women
Placement services	Director of Placement Services
Public Information	Director of Public Information
Student organizations	Dean of Men, Dean of Women
Summer session	Coordinator of Summer Session
Testing and counseling	Director of Counseling and Testing
Veterans affairs	Office of Financial Aids

TABLE OF CONTENTS

College Calendar	1
Foreward and Directory	4
Board of Regents and Board of Trustees	6
Administrative Staff	7
Faculty	9
General Information	27
College Philosophy	28
Standards for Student Conduct	29
Schedule of Fees	33
Student Services	37
Financial Aids	37
Student Affairs	46
Academic Regulations	49
Admissions	49
Requirements for Graduation	51
General Education Requirements	54
The Curriculum	65
Divisional Organizations and Objectives	65
Courses of Instruction	69
Teacher Education Program	96
Combined/Affiliated Programs (Occupational)	159
Pre-Professional Curricula	163
Technology Curricula	164
Continuing Education Division	165
Suggested Order of Study	166

MISSOURI SOUTHERN STATE COLLEGE

1978 — 1980

BOARD OF REGENTS

Fred Hughes, President - 1980
Jerry Wells, President Elect - 1978
*Elvin Ummel, Secretary
Carolyn D. McKee, Vice President - 1979
William J. Swab, Jr. - 1981
Ray W. Grace - 1982
Don R. Roderique - 1983

BOARD OF TRUSTEES

Arthur Kungle, Sr. - 1978
Elvin Ummel - 1978
Donald R. Patterson - 1980
Jerry E. Wells - 1980
Fred Hughes - 1982
Carolyn D. McKee - 1982

*Appointed by Board of Regents

ADMINISTRATIVE STAFF

Leon C. Billingsly President
Floyd E. Belk Vice President for Academic Affairs
Paul R. Shipman Vice President for Business Affairs

Harold Cooper Dean, Division of Arts and Sciences
Julio S. Leon Dean, Division of Business Administration
Charles F. Niess Dean, Division of Education and Psychology
Director of Teacher Education
James K. Maupin Dean, Division of Technology

George H. Volmert Registrar
Richard D. Humphrey Director of Admissions, Aids and Awards
Lorine V. Miner Director of Placement and Alumni Affairs
Gwen E. Hunt Director of Public Information
David C. Bingman Assistant to Vice President for Academic Affairs and Director of Continuing Education

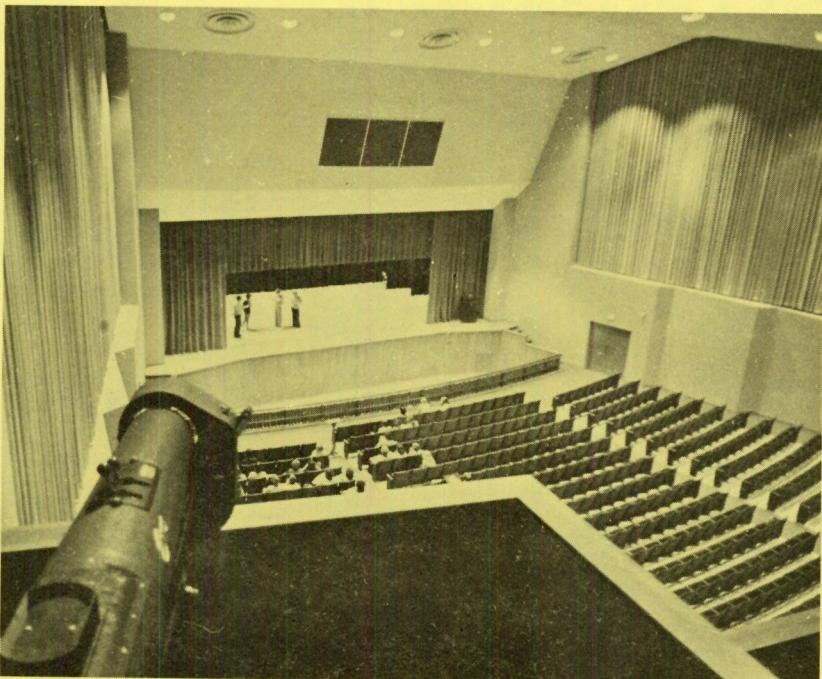
William L. Ferron Head, Department of Biology
F. Joe Sims Head, Department of Fine Arts
Harry Zuger Head, Department of Language & Literature
J. Larry Martin Head, Department of Mathematics
Vernon D. Baimonte Head, Department of Physical Sciences
Robert E. Smith Head, Department of Social Sciences
Max D. Oldham Head, Department of Physical Education
J. Merrell Junkins Head, Department of Psychology

Glenn D. Dolence Dean of Student Personnel Services
Myrna L. McDaniel Dean of Women
Eugene C. Mouser Director of Counseling and Testing
Larry K. Karst Guidance Counselor
James F. Asberry Dean of Men and Director of Housing
Kreta Gladden Admissions, Aids and Awards Counselor
Bobby L. Martin Veterans Coordinator
Lloyd L. Dryer College Psychologist
Irma J. Hartley College Nurse
Dudly F. Stegge Director of College Union
James L. Frazier Director of Athletics
James E. Gilbert Assistant in Financial Aids
Ronald Anderson Veterans Coordinator

Elmer E. Rodgers Head Librarian
Ross C. Snyder Director of Instructional Media
Barbara A. Beard Circulation Librarian
Arlene E. Moore Reference Librarian
Elizabeth J. Mueller Processing Librarian
Mary Lou Dove Periodical Librarian

Harry Castor Purchasing Agent
John F. Johnson Personnel Records
Sidney S. Shouse Controller

Douglas McCreedy	Food Service Manager
Howard Dugan	Superintendent of Buildings and Grounds
Mark W. McDonald	Mechanical Engineer
Charles D. Moss	Bookstore Manager
Dale Mooney	Mail and Duplicating Services Supervisor
Adrian Meacham	Security Supervisor



FACULTY

(The date indicates the first year of service at this college.)

Leon C. Billingsly (Professor) B.S., Southwest Missouri State College M.S., Kansas State College of Pittsburg Ed.D., University of Arkansas	President of the College 1962
Floyd E. Belk (Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ed.D., Oklahoma State University	Vice President for Academic Affairs 1966
Paul R. Shipman (Professor) B.S.E., Southwest Missouri State College M.S., Kansas State College of Pittsburg Ed.D., University of Arkansas	Vice President for Business Affairs 1965
Roger E. Adams (Assistant Professor) B.S.I.T., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ed.S., Kansas State College of Pittsburg	Automotive Technology 1967
Geraldine H. Albins (Instructor) B.S.E., Kansas State College of Pittsburg M.A., Texas Woman's University	Physical Education 1975
Lawrence R. Albright, II (Associate Professor) B.S., Northwest Missouri State College M.S., University of Nebraska Ph.D., University of Nebraska	Chemistry 1969
Charles S. Allen (Associate Professor) B.S., Drury College M.S., Illinois Institute of Technology Ph.D., University of Georgia	Mathematics 1970
James F. Asberry (Instructor) B.S., Southeast Missouri State College M.A., Southeast Missouri State College Ph.D. Candidate, University of Arkansas	Dean of Men and Director of Housing 1976
Brian C. Babbitt (Instructor) A.B., Western Washington State College M.A., University of New Mexico Ph.D. Candidate, University of New Mexico	Psychology 1977
Vernon D. Baiamonte (Professor) A.B., Colorado State College M.A., Colorado State College Ph.D., Indiana University	Chemistry 1967 Head, Physical Science Dept.

FACULTY

Michael E. Banks (Associate Professor) B.S., Oklahoma State University M.S., New Mexico Highlands University Ph.D., University of Kansas	Education 1975
Barbara A. Beard (Instructor) A.B., Kansas State College of Pittsburg M.A., University of Missouri	Circulation Librarian 1977
Sallie L. Beard (Assistant Professor) B.S., Missouri Southern State College M.S., Kansas State College of Pittsburg	Physical Education 1976
David C. Bingman (Associate Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ed.D., University of Arkansas	Director of Continuing Education and Assistant to Vice President for Academic Affairs 1963
E. Enid Blevins (Assistant Professor) B.S., Southwest Missouri State College M.S., Kansas State College of Pittsburg	English 1966
Harold W. Bodon (Assistant Professor) A.B., University of Utah M.S., California State College Hayward Ph.D. Candidate, Brigham Young University	Foreign Languages 1971 Soccer Coach
Rochelle L. Boehning (Associate Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Graduate Study, Illinois Institute of Technology, University of Arkansas	Mathematics 1967
G. Joyce Bowman (Assistant Professor) B.S., Southwest Missouri State College M.A., University of Arkansas	Theatre 1967
Milton W. Brietzke (Associate Professor) A.B., San Jose State College M.A., Western Reserve University Doctoral Study, University of Denver	Director of Theatre 1956
Christine R. Brown (Instructor) A.B., Northeastern Oklahoma State University M.A., University of Arkansas	Sociology 1976
Willis D. Calicott (Instructor) B.B.A., Syracuse University M.B.A., Syracuse University	Computer Science 1976

FACULTY

Anthony J. Calwhite (Assistant Professor)
B.S., Southwest Missouri State College
M.E., University of Missouri

Physical Education 1969

Carmen M. Carney (Assistant Professor)
B.S., Catholic University of Puerto Rico
M.A., University of Iowa
Ph.D., University of Iowa

Foreign Languages 1974

Albert J. Carnine (Assistant Professor)
B.M.E., Illinois Wesleyan University
M.M., Southern Methodist University
M.M.E., Southern Methodist University
D.M.A., University of Texas

Music 1977

JoAnna M. Challman (Instructor)
A.B., University of Kansas
M.A., University of Kansas

Sociology 1972

Samuel L. Claussen (Instructor)
A.B., Missouri Southern State College
B.S., Missouri Southern State College
M.F.A., University of Virginia

Theatre 1977

Jerry P. Coburn (Assistant Professor)
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg
Ed.S., Kansas State College of Pittsburg
Ph.D., Kansas State University

Drafting and Design 1973

Nathaniel S. Cole (Associate Professor)
B.F.A., Kansas City Art Institute
M.F.A., Kansas City Art Institute

Art 1970

Francisco R. Colon (Assistant Professor)
B.S., Southwest Missouri State College
M.A., University of Illinois

Foreign Languages 1968

Allan L. Combs (Instructor)
B.S., Ohio State University
M.S., University of Georgia
Ph.D., University of Georgia

Psychology 1975

Edith M. Compton (Assistant Professor)
B.S., Kansas State College of Pittsburg
M.S., Kansas State College of Pittsburg

Business Administration 1967

FACULTY

Harold Cooper (Professor) A.B., Berea College M.A., University of Nebraska Ph.D., University of Nebraska	History 1968 Dean, Division of Arts and Sciences
Mary L. Cornwell (Instructor) A.B., University of Tulsa M.A., University of Arkansas	Speech 1975
Jimmy C. Couch (Assistant Professor) A.B., Texas Technological College M.A., Texas Technological College Ph.D., University of South Carolina	English 1970
John M. Cragin (Assistant Professor) B.S., United States Military Academy, West Point B.S., Missouri Southern State College M.S., Purdue University	Physics and Data Processing 1967
Barbara S. Crider (Assistant Professor) A.B., University of Missouri M.A., University of Alabama Ph.D. Candidate, University of Alabama	English 1976
Rosemary K. Curb (Assistant Professor) A.B., Rosary College M.A., University of Arkansas Ph.D., University of Arkansas	English 1976
Elliott A. Denniston (Assistant Professor) A.B., Princeton University M.A., University of Michigan Ph.D., University of Michigan	English 1974
Lucille E. Dinges (Assistant Professor) A.B., Fort Hays Kansas State College M.A., Louisiana State University Ph.D. Candidate, Louisiana State University	English 1969
Darral A. Dishman (Assistant Professor) B.F.A., Kansas City Art Institute M.S., Kansas State College of Pittsburg	Director of Art Department 1966
Glenn D. Dolence (Associate Professor) B.S., Missouri Valley College M.S., Kansas State College of Pittsburg Ed.D., University of Arkansas	Dean of Student Services 1969

FACULTY

Mary L. Dove (Assistant Professor) B.S., University of Missouri M.A., University of Missouri M.S., University of Missouri	Periodical Librarian 1969
Leland D. Easterday (Associate Professor) B.S., Northeast Missouri State College M.A., Southern Illinois University Ed.D., University of Arkansas	Education 1967
Doris T. Elgin (Associate Professor) B.S. in Nursing, University of Tennessee M.A., Memphis State University M.S.N., Texas Woman's University	Nursing 1968
Gerald E. Elick (Associate Professor) A.B., University of Missouri M.S., University of Arkansas Ph.D., University of Arkansas	Biology and Geology 1969
Mary A. Elick (Instructor) B.S.E., Southwest Missouri State University M.S., University of Arkansas	Mathematics 1974
William C. Elliott (Assistant Professor) B.M.E., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Music 1968
Ronald R. Ellis (Instructor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Physical Education 1974
Brent L. England (Instructor) B.S.B.A., Kansas State College of Pittsburg M.B.A., Kansas State College of Pittsburg	Business Administration 1976
William L. Ferron (Associate Professor) B.S., Creighton University M.A., Southern Methodist University Ph.D., Kansas State University	Biology 1971 Head, Biology Dept.
Carl A. Finke (Associate Professor) B.S.B.A., University of Arkansas J.D., University of Oklahoma CPA	Business Administration 1970
Richard H. Finton (Assistant Professor) A.B., Northwestern State University M.E., Northwestern State University	Speech 1977 Debate Coach

FACULTY

Jon H. Fowler (Assistant Professor) B.S., Southwest Missouri State College M.F.A., University of Arkansas	Art 1968
James L. Frazier (Assistant Professor) A.B., University of Wichita M.A., Wichita State University	Physical Education 1971 Director of Athletics and Head Football Coach
Donnie D. Gaddis (Instructor) B.S.E., Southwest Missouri State University M.A., Northeast Missouri State University	Physical Education 1974
Helen R. Gardner (Associate Professor) A.B., Bradley University M.A., Bradley University Ed.D., Indiana University	English 1968
CPT Warren D. Garlock (Assistant Professor) B.S., Siena College	Military Science 1977
Robert D. Gelso (Instructor) B.S.E., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ed.S., Kansas State College of Pittsburg	Industrial Arts 1977
E. Sam Gibson (Associate Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ph.D., Kansas State University	Biology 1967
James E. Gilbert (Instructor) A.B., University of Missouri M.A., Southwest Missouri State University	Assistant in Financial Aids 1974
Kreta C. Gladden (Instructor) B.S., Missouri Southern State College M.B.A., Pittsburg State University	Admissions Counselor 1974
Larry W. Goode (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Business Administration 1968
Judy Grant (Assistant Professor) A.B., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ed.S., Kansas State College of Pittsburg	Sociology 1969

FACULTY

James M. Gray (Assistant Professor) B.B.A., Dana College M.B.A., University of Arkansas	Business Administration 1969 Director of Computer Center
George C. Greenlee (Instructor) A.B., Northeast Louisiana State College M.A., Northeast Louisiana State College	English 1970
Mary A. Gremling (Instructor) B.S., University of Missouri at Kansas City B.S.E., Missouri Southern State College	Director of Dental Programs 1974
LT COL Carlyn J. Griggs (Professor) B.S., Citadel Military Academy M.B.A., University of Kansas	Military Science 1976
Kathleen G. Grim (Instructor) B.S.E., Northeast Missouri State University M.A., Northeast Missouri State University	Business Administration 1975
Conrad E. Gubera (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ph.D. Candidate, Oklahoma State University	Sociology 1967
James L. Harbin (Assistant Professor) B.S., Arkansas State University M.B.A., Arkansas State University Ph.D. Candidate, University of Arkansas	Business Administration 1977
Henry L. Harder (Associate Professor) A.B., Subiaco College M.A., University of Arkansas Ph.D., University of Maryland	English 1970
Wayne A. Harrell (Assistant Professor) B.M.E., Wichita State University M.M.E. Wichita State University Ed.D., University of Northern Colorado	Music 1971
Robert A. Harris (Assistant Professor) B.M., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Pupil of Rosina Lhevinne	Music 1971
Garry J. Hess (Instructor) B.S., Fort Hays Kansas State College M.A., Kansas State College of Pittsburg	Art 1971

FACULTY

Robert O. Highland (Professor) B.M.E., University of Oklahoma M.M.E., University of Oklahoma Ed.D., University of Arkansas	Director of Student Teaching Education 1968
T.L. Holman (Associate Professor) A.B., Southwestern College, Winfield, Kansas M.A., Kansas State College of Pittsburg Ed.D., Oklahoma State University	History 1962
Julie S. Hughes (Assistant Professor) B.S., Kansas State College of Pittsburg M.A., Kansas State College of Pittsburg	History 1963
Richard D. Humphrey (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Director of Admissions Aids and Awards 1968
Duane L. Hunt (Assistant Professor) A.B., Southwest Missouri State College M.A., University of Arkansas	Theatre 1964
James R. Jackson (Assistant Professor) B.S., Colorado State University M.A., University of Northern Colorado Ph.D., Rutgers: The State University of New Jersey	Biology 1976
Marilyn J. Jacobs (Instructor) B.S. in Nursing, University of Nebraska	Nursing 1967
Jasbir S. Jaswal (Assistant Professor) A.B., University of Rajputana, India M.A., University of Rajputana, India M.A., University of Texas, El Paso Ph.D., University of Missouri	Business Administration 1977
Bernard A. Johnson (Instructor) B.S., Missouri Southern State College M.A., Central Missouri State College	Business Administration 1974
Delbert I. Johnson (Assistant Professor) B.M.E., University of Wichita M.M.E., University of Wichita	Music 1967
Jack D. Jolly (Assistant Professor) B.S.E., University of Oklahoma M.A., University of Oklahoma Graduate Study, University of Wisconsin	Mathematics 1968

FACULTY

David E. Jones (Assistant Professor) B.S., Southeastern Oklahoma State M.S., Oklahoma State University CPA	Business Administration 1976
Rick H. Jones (Instructor) B.F.A., Wright State University M.F.A., Maryland Institute College of Art	Art 1977 Director, Spiva Art Center
J. Merrell Junkins (Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg Ed.D., Oklahoma State University	Psychology 1963 Head, Dept. of Psychology
Larry K. Karst (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State Teachers College of Emporia	Guidance Counselor 1968
Nancy J. Karst (Instructor)	Dental Assisting 1975
Harrison M. Kash (Assistant Professor) A.B., Kansas State College of Pittsburg M.S., Kansas State University	Chemistry 1958
Retha L. Ketchum (Instructor) B.S. in Nursing, Creighton University	Nursing 1970
Joseph P. Lambert (Associate Professor) A.B., Mississippi College M.A., Mississippi College Ph.D., Auburn University	English 1970
Douglas B. Landrith (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Physical Education 1959 Golf Coach
L. Keith Larimore (Professor) B.S.B.A., Kansas State College of Pittsburg M.B.A., University of Oklahoma Ph.D., University of Arkansas	Business Administration 1966
Charles E. Leitle (Professor) B.S.B.A., University of Arkansas M.B.A. University of Arkansas Ph.D., University of Arkansas	Business Administration 1970

FACULTY

Julio S. Leon (Professor) A.B., Universidad Tecnica (Santiago, Chile) M.B.A., North Texas State University Ph.D., University of Arkansas	Business and Economics 1969 Dean, Division of Business Administration
William R. Livingston (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., University of Illinois	Mathematics 1968
Terry D. Marion (Assistant Professor) B.S., Southwest Missouri State University M.S., Kansas State College of Pittsburg Ed.S., Pittsburg State University	Business Administration 1976
Robert P. Markman (Associate Professor) B.S., Monmouth College M.A., University of Oklahoma Ph.D., University of Oklahoma	History 1967
Bobby L. Martin (Instructor) A.B., Missouri Southern State College M.S., Pittsburg State University	Veterans Coordinator 1973
J. Larry Martin (Associate Professor) B.S., University of Tulsa M.S., University of Tulsa Ed.D., University of Georgia	Mathematics 1965 Head, Mathematics Dept.
B.W. Mason (Associate Professor) A.B., Colorado State College of Education, Greeley M.A., Colorado State College of Education, Greeley Graduate Study, Teachers College, Columbia, University	Education 1967 Director, Micro-Teaching Lab.
Richard W. Massa (Associate Professor) B.J., University of Missouri, Columbia M.A., University of Missouri, Columbia Graduate study, University of Arkansas	Journalism 1972
James K. Maupin (Associate Professor) B.S., Central Missouri State College M.S., Kansas State College of Pittsburg Graduate study, University of Minnesota, Oklahoma State University, University of Oklahoma, University of Oregon	Dean, Division of Technology 1955
Bernard P. McCormick (Assistant Professor) A.B., University of Notre Dame M.S., University of Southern Mississippi	Philosophy 1968

FACULTY

Myrna L. McDaniel (Instructor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Dean of Women 1973
Robert J. Miller (Assistant Professor) B.S., Central Missouri State College M.A., Central Missouri State College	Business Administration 1968
Lorine V. Miner (Associate Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Director of Placement and Alumni Affairs 1966
Ray G. Minkler (Assistant Professor) A.B., Utah State University M.A., University of Minnesota Ph.D. Candidate, University of Minnesota	Political Science 1976
Grace C. Mitchell (Assistant Professor) A.B., Greensboro College M.A., Pennsylvania State University	English 1958
Arlene E. Moore (Assistant Professor) A.B., Southwest Missouri State College M.A., Southwest Missouri State College M.L.S., University of Oklahoma	Reference Librarian 1971
Henry G. Morgan (Associate Professor) A.B., University of Southern Mississippi M.A., University of Southern Mississippi Ph.D., University of Colorado	English 1971
Arnal W. Morris (Instructor)	Automotive Technology 1976
Melvyn W. Mosher (Assistant Professor) A.B., University of Washington M.S., University of Idaho Ph.D., University of Idaho	Physical Science 1974
Eugene C. Mouser (Associate Professor) B.M.E., Oklahoma State University M.S., Oklahoma State University Ed.D., Oklahoma State University	Director of Counseling and Testing 1970
Elizabeth J. Mueller (Instructor) A.B., Missouri Valley College	Processing Librarian 1966

FACULTY

Gary R. Mulkey (Instructor) B.S., Missouri Southern State College M.S., University of Arkansas Ph.D. Candidate, University of Arkansas	Mathematics 1977
Charles F. Niess (Professor) B.S., Central Missouri State College M.S., Central Missouri State College Ed.D., Colorado State College	Education 1966 Dean, Division of Education and Psychology
Patricia F. Noirlalise (Instructor)	Dental Assisting 1975
Max D. Oldham (Assistant Professor) B.S., Southwest Missouri State University M.S., Kansas State College of Pittsburg Ed.D., Oklahoma State University	Physical Education 1973 Head, Physical Education Dept.
Orty E. Orr (Professor) B.S., Kansas State College of Pittsburg M.S., Oklahoma State University Ph.D., Oklahoma State University	Biology 1966
Pamela R. Overman (Instructor) B.S., University of Missouri at Kansas City	Dental Hygiene 1975
William H. Paapanen (Assistant Professor) A.B., University of Oklahoma M.Acct., University of Oklahoma CPA	Business Administration 1976
Roger Paige (Assistant Professor) A.B., University of Missouri M.A., University of Missouri Ph.D. Candidate, University of Missouri	Psychology 1976
Russell A. Phillips (Associate Professor) B.S., Iowa State University Ph.D., Iowa State University	Physics 1970
Harry E. Preble (Professor) A.B., University of Illinois M.A., University of Illinois Ph.D., University of Illinois	English 1968
Vonnie R. Prentice (Assistant Professor) B.S.E., Northeastern Oklahoma State College M.S., University of Arkansas Ph.D., University of Arkansas	Biology 1974

FACULTY

Robert G. Price (Assistant Professor) B.S., University of Kansas M.S., Kansas State College of Pittsburg Ph.D., Kansas State University	Business Administration 1973
Gail K. Renner (Assistant Professor) B.S., Southwest Missouri State College M.A., University of Missouri, Columbia M.A., University of Missouri, Kansas City Ph.D., University of Missouri	History 1965
Dennis H. Rhodes (Professor) A.B., University of Texas M.E., University of Houston Ph.D., Southern Illinois University	Speech 1970
Hilda E. Richardson (Instructor) B.S., Kansas State College of Pittsburg M.S., Kansas State Teachers College of Emporia	Education 1972
Elmer E. Rodgers (Associate Professor) A.B., Youngstown University M.S.L.S., Western Reserve University	Head Librarian 1968
SFC Michael T. Rogers (Instructor)	Military Science 1976
James V. Sandrin (Associate Professor) B.S., Southern Illinois University M.S., Southern Illinois University Ph.D., Southern Illinois University	Education 1969
Delbert F. Schafer (Associate Professor) A.B., Southwestern State College M.A., University of Oklahoma Ph.D., University of Oklahoma	History 1968
MSG Jan Schalavin (Instructor)	Military Science 1977
Rebecca S. Schmidt (Instructor) B.S.N., Kansas State College of Pittsburg	Nursing 1977
Donald J. Schultz (Instructor) A.B., Columbia College	Machine Technology 1977
William M. Scruggs (Assistant Professor) A.B., Westminster College M.A., Kansas University M.S., Denver University Ph.D., Denver University	Mathematics 1976

FACULTY

Donald L. Seneker (Instructor) B.S., Central Missouri State College	Director, Police Academy 1971 Law Enforcement
Bobbie Z. Short (Assistant Professor) B.S., Southwest Missouri State College M.S., Kansas State College of Pittsburg	English and Speech 1965
F. Joe Sims (Associate Professor) B.M., Southwestern College, Winfield, Kansas M.A., University of Northern Colorado Ed.D., University of Oklahoma	Music 1971 Head, Dept. of Fine Arts
Ann M. Slanina (Assistant Professor) A.B., St. Francis College, Fort Wayne, Indiana M.A., University of Dayton Ph.D., University of New Mexico	English 1971
Marion E. Sloan (Assistant Professor) A.B., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Physics 1967
Robert E. Smith (Associate Professor) B.S., Northwest Missouri State College, Maryville, Mo. B.S., University of Wisconsin M.A., Oklahoma State University Ph.D., Oklahoma State University	History 1972 Head, Dept. of Social Sciences
Ross C. Snyder (Associate Professor) B.S., Taylor University M.A., Ball State University	Education 1968 Director of Educational Media
Jack G. Spurlin (Instructor) B.S., Northeast Missouri State University	Law Enforcement 1975
Sam J. Starkey (Associate Professor) B.S., University of Arkansas M.B., University of Arkansas Ed.D., University of Arkansas	Education and Psychology 1966
Annetta E. St. Clair (Assistant Professor) A.B., Kansas State College of Pittsburg M.A., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Political Science 1964
Wayne E. Stebbins (Assistant Professor) B.S., Kansas State Teachers College of Emporia M.S., Kansas State Teachers College of Emporia	Biology 1969

FACULTY

Bob F. Steere (Professor) B.S., Southwestern State College M.S., Arizona State College Ed.D., Utah State University	Education 1969
Dudley F. Stegge (Assistant Professor) B.S., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Physical Education 1952 Director of College Union
Arthur L. Strobel (Assistant Professor) B.S., Southeast Missouri State College M.S., University of Arkansas	Physics 1963
Pudukkottai D. Subramanian (Associate Professor) B.S., University of Delhi, India M.A., Miami University of Ohio Ph.D., University of Wisconsin	Mathematics 1970
Don D. Tate (Instructor) B.S.E., University of Arkansas M.A., University of Houston	Sociology 1974
Robert R. Terry (Instructor) B.S., Northeast Missouri State University	Law Enforcement 1974
Charles C. Thelen (Assistant Professor) A.B., Occidental College M.A., University of Northern Colorado Ed.D., University of Northern Colorado	Music 1973
CPT Guy M. Thomas (Assistant Professor) A.B., Belmont Abbey College	Military Science 1970
John W. Tiede (Assistant Professor) B.S., Southwest Missouri State University M.B.A., University of Arkansas J.D., University of Missouri	Business Administration 1968
David L. Tillman (Instructor) B.S., Brigham Young University M.S., Brigham Young University	Biology 1975
Hilda J. Turner (Assistant Professor) B.S., Arkansas Polytechnic College M.E., University of Arkansas Ed.D., University of Arkansas	Business Administration 1977

FACULTY

Warren F. Turner (Instructor) B.S.E., Kansas State College of Pittsburg M.S., Kansas State College of Pittsburg	Physical Education 1976 Head Baseball Coach
Jacqueline C. Vlasak (Instructor) B.S. in Nursing, California State University M.A., Holy Names College	Nursing 1975 Director of Nursing
Richard E. Vollmer (Visiting Instructor) A.B., Southwestern Oklahoma State University M.A., Wichita State University	Political Science 1977
George H. Volmert (Assistant Professor) B.S., Northeast Missouri State College M.A., Northeast Missouri State College	Education 1966 Registrar
James T. Volskay (Associate Professor) B.S.E., Southwest Missouri State College M.E., University of Missouri Ph.D., University of Missouri	Psychology 1969
Philip R. Whittle (Associate Professor) B.S., University of Kentucky Ph.D., Iowa State University	Chemistry 1970
Robert C. Wiley (Professor) B.S., Trinity University M.Ed., Trinity University Ed.D., Oklahoma State University	Education 1969
Jimmie L. Williams (Instructor) B.S., Missouri Southern State College	Law Enforcement 1975
Tillman D. Williams (Assistant Professor) B.S., Southwest Missouri State University M.S., Indiana University Ph.D. Candidate, Indiana University	Physical Education 1977 Head Basketball Coach
G. I. Willoughby (Instructor) A.B., Wayne State College M.A., University of Northern Colorado	Physical Education 1977 Women's Basketball Coach
Edward W. Wuch (Assistant Professor) B.S., University of Missouri M.E., University of Missouri Ed.D. Candidate, Arizona State University	Education 1969

FACULTY

Venus Yount (Assistant Professor) B.S., Kansas State College of Pittsburg M.A., University of Arkansas	Physical Education 1959
Donald R. Youst (Assistant Professor) A.B., Kansas State Teachers College M.S., Kansas State Teachers College, Emporia Ph.D., University of Nebraska	Political Science 1971
Harry Zuger (Associate Professor) A.B., Detroit Institute of Technology M.A., Wayne State University Ph.D., Wayne State University	English 1976 Head, Language and Literature Department

EMERITUS FACULTY

Lloyd L. Dryer (Professor) B.S., Oklahoma State University M.A., Oklahoma State University Ed.D., Oklahoma State University	Psychology 1950 College Psychologist
Harry C. Gockel (Professor) A.B., Washington University M.A., Washington University M.S., University of Wisconsin	History and Geography 1938
Cleetis Headlee (Professor) B.S., University of Missouri M.A., University of Missouri	English 1946
Martha Ann McCormick (Professor) M.A., University of Chicago Ph.B., University of Chicago	Mathematics 1937
Dorothy A. Stone (Professor) B.S., University of Missouri M.A., University of Missouri	Business Administration 1939

PART-TIME FACULTY

Hazel R. Brietzke B.S., Auburn University	Theatre
James Brown B.S., Missouri Southern State College CPA	Business Administration
Ellen Coleman B.S., University of Missouri	Nursing

FACULTY

Phillip A. Glades

B.S.E., Missouri Southern State College
J.D., University of Arkansas

Business Administration**William N. McDonald, Jr.**

B.S., University of Missouri

Business Administration**H. Waldo Wasson**

B.S.E., Northeast Missouri State College
M.A., University of Missouri
Ph.D., Louisiana State University & A. & M. College

Speech Correction

AFFILIATED FACULTY

Wiley Beals

Graduate Burge Protestant Hospital School of Radiologic Technology
Registered Radiologic Technologist
American Registry of Radiologic Technologists

Radiologic Technology**John P. Brown**

Certified flight & ground instructor and pilot examiner

Aviation**Maurice B. Vincent, D.D.S.**

D.D.S., University of Louisville School of Dentistry

Dental Programs**C.C. Young, M.D.**

Director-School of Radiologic Technology

GENERAL INFORMATION

THE COMMUNITY AND SERVICE AREA

Missouri Southern State College is situated in Southwest Missouri, eleven miles from the Kansas state line, 40 miles from the Arkansas border, and 15 miles from Oklahoma. In this southwest part of Missouri lies a nine-county area comprising approximately 250,000 people.

The campus, located at the northeast edge of Joplin on 310 acres of gently rolling land, is within commuting distance of a large college population. The college lies at the heart of a cluster of cities with populations up to 45,000. Some of these cities are Joplin (the largest), Carthage, Webb City, Carl Junction and Sarcoxie. The college is located in the hub of a four-state area with its network of east-west and north-south major highways and good air transportation schedules. Known in the early 1900's as an area of diversified agricultural activities and lead and zinc mining, it is even better known today as a rapidly growing industrial and service center. It is within easy driving distance of the Ozarks, one of the great recreational areas of the United States. Cultural activities, educational programs from kindergarten to college, and beautiful churches for all faiths are ideal for a college setting.

HISTORY

Missouri Southern State College originated in 1937 as Joplin Junior College. It was a part of the Joplin Public School System, but the first year of classes were conducted by the Extension Division of the University of Missouri.

The first year, classes were held in the Joplin Senior High School building. The college moved into its own building at Fourth Street and Byers Avenue on September 6, 1938. After 20 years in this location the college was transferred to 310 West Eighth Street where it continued to operate until June, 1967. The educational and administrative functions of Missouri Southern State College were moved to the new campus in June 1967. Here the college is operating on a new, multiple building campus with an enlarged program and student body.

A series of new organizational and legal developments began in April, 1964.

On April 1, 1964, the voters created the Junior College District of Jasper County, naming a six-member Board of Trustees. This act ended the junior college's 27 years of existence as a part of the Joplin Public School System. The new junior college district included Jasper County and parts of three other counties—Newton, Lawrence and Barton. The institution was renamed Jasper County Junior College.

On July 22, 1965, the 73rd General Assembly of the Missouri Legislature passed House Bill No. 210 providing for the establishment of a two-year state senior college in Jasper County when the

GENERAL INFORMATION

academic facilities of the Junior College District of Jasper County should become available. Meanwhile, in anticipation of the passing of the House Bill No. 210, the Board of Trustees adopted the name Missouri Southern College in May, 1965.

The legislative act creating the state senior college provided for the administration of the junior and senior college through a governor-appointed Board of Regents. The appointments were made on October 13, 1965, the date that marks the beginning of the operation of Missouri Southern State College under the Board of Regents. The law directed the Board of Trustees to assume the responsibility of levying the necessary taxes within the Junior College District of Jasper County which, together with state junior college aid and funds available from other sources, are sufficient to pay the costs of the junior college operation and the costs to date of capital improvements for both the junior and senior colleges. The state provided the operating cost of the senior college.

July 1, 1975, on the campus of Missouri Southern State College, the Governor of Missouri signed Senate Bill No. 114. This bill provided that from July 1, 1977 forth the State of Missouri will provide the funds necessary to provide the staff, cost of operation, and the payment of all capital improvements. Thus following approximately ten years of legislative effort by the citizens of Southwest Missouri, this college has taken its place with the family of higher education institutions in the State of Missouri.

COLLEGE PHILOSOPHY AND PURPOSES

Missouri Southern State College is dedicated to the principle of developing a college community where all members are given the opportunity to learn, not only for the sake of learning, but for the purpose of revealing ways to live a better life.

Missouri Southern State College offers a diversity of study designed to satisfy a wide range of student and community interests. The college endeavors to maintain quality instruction at all levels.

Missouri Southern State College shares a responsibility with other state colleges to serve any eligible student in the State of Missouri who may apply for admission. In addition, the college also recognizes its responsibility and obligation to serve the citizens of the immediate community.

The college fulfills its obligation to both state and community by:

- a. Providing an opportunity for students to pursue a wide range of cultural and intellectual interests.
- b. Providing an opportunity for students to prepare for a wide range of established and emerging careers in industry, education, government, and business
- c. Providing a variety of pre-professional and technical programs at less than the bachelor's degree level.

GENERAL INFORMATION

- d. Providing a variety of continuing education and extension course opportunities for individuals at all levels of educational attainment.
- e. Providing an opportunity for students to prepare for a graduate education.

STANDARDS FOR STUDENT CONDUCT

As active members of the college community, students at Missouri Southern State College have the rights and privileges enjoyed by members of all democratic communities. They also have the responsibilities and obligations which accompany these rights. Missouri Southern State College is guided by and observes the principle that there shall be no difference in the treatment of persons because of race, creed, color or national origin; and all members of the academic community are expected to support this principle.

Students have the responsibility of upholding the standards, traditions and policies of the college which has granted them membership in the academic community at their own request. They also have the responsibility of making maximum use of their abilities, of exercising good judgment, of observing the rights of others, and of adhering to the requirements of adult society.

In addition, the following general policies are in effect:

1. Students have the obligation to obey all rules and regulations and to preserve all property provided for their education.
2. Students are expected to conform to all federal, state and local laws. Gambling, alcoholic beverages, drugs, firearms, ammunition and explosives are specifically prohibited on college property. Students should be aware of the principles of libel and slander. Practice of these principles within the academic community could result in expulsion from the college.
3. The conduct of the individual student is an important indication of his character and of his future potential in life. Cheating, falsification of documents and immoral conduct will not be tolerated.
4. Students are expected to conform to the usual accepted social customs of the community.
5. Students shall not engage in or incite others to participate in obstructive or disruptive activities, deprive others of their rights, do harm to other individuals or property, or interfere with college or other officials in the performance of their duties.
6. The College Union of Missouri Southern State College and its facilities are dedicated to and for the primary use of the students, faculty, staff and their authorized guests. Individuals entertaining guests in the College Union are responsible for their proper identification, registration and conformance to the rules established for such guests. When not in use by campus organizations, off-campus groups may use the facilities of the Union.

GENERAL INFORMATION

7. The facilities of the Residence Halls at Missouri Southern State College are primarily for the use of the residents thereof and their invited guests. The host is responsible for the registration and conduct of his guests. Disciplinary action will be taken against non-residents making unauthorized use of residence hall facilities.

8. The prevention of fire and safety of others is the responsibility of the individual. Students shall not set off false fire alarms, misuse fire equipment, or refuse to obey lawful directions by fire wardens.

The foregoing shall apply to all student conduct, and failure to observe these standards will constitute basis for disciplinary action, the maximum of which is dismissal from the College. Registration and participation as a student in Missouri Southern State College shall constitute full acceptance of these standards, as well as of all other rules and standards of conduct which have been or may be adopted.

ACCREDITATION AND MEMBERSHIPS

Missouri Southern State College is accredited by the North Central Association of Colleges and Secondary Schools, the National Council for Accreditation of Teacher Education, and by the Missouri State Department of Education.

Major memberships include the American Council on Education, the American Association of State Colleges and Universities, the American Association of Colleges for Teacher Education, the Missouri Association of Junior Colleges, and the North Central Association Sub-Committee on Institutions for Teacher Education.

THE CAMPUS

Missouri Southern State College is located at the corner of Newman and Duquesne Roads near the northeast edge of Joplin. Sixteen new buildings and several remodeled older buildings serve the instructional and student activity needs.

Spiva Library, named in honor of the late George A. Spiva of Joplin, a friend and generous supporter of the college, provides an atmosphere which contributes to an intellectual climate. It is a part of the **Learning Resources Center** which includes the **Instructional Media Center** as well as the Library.

Hearnes Hall is named after the Honorable Warren E. Hearnes, former Governor of Missouri. The building is the administration headquarters and the reception center of the campus. It contains, also, instructional classrooms and faculty offices.

The L.R. Reynolds, Jr., Science and Mathematics Hall provides three large, elevated lecture rooms, regular classrooms, science laboratories and faculty offices. It is well equipped to meet the requirements of science and mathematics programs.

GENERAL INFORMATION

The Fine Arts Complex is a series of three buildings that serves the areas of Art, Music, and Theatre. The Art Building includes a large exhibit hall that serves the Spiva Art Center of Joplin as well as the needs of the college. The Music Building includes a beautiful recital hall that was recently dedicated in honor of our past Vice President for Academic Affairs, Dr. Edward S. Phinney, the third building in this complex is the showplace of the campus, a 2,000-seat auditorium. This auditorium is used extensively by the community, by the theatre department, and by other agencies of the college.

The Physical Education Building houses the college basketball floor, classrooms, faculty offices, and many facilities for physical education classes.

The College Union serves the total campus with cafeteria, coffee shop, bookstore, lounge areas, Student Senate offices, yearbook offices, faculty lounge, ballroom, etc.

The Business Administration Building is a combination of the old Mansion House and the new building addition. It houses specialized and regular classrooms and faculty offices.

The Barn Theatre is a barn converted into an air-conditioned theatre with classrooms, dressing rooms, costume rooms, ticket booth and foyer.

Kuhn Hall is a new structure that provides facilities for the nursing education program, computer center and the student health center. This building is named after Dr. J.R. Kuhn, Jr., a strong supporter and leader of the nursing education program at Missouri Southern State College. The Student Health Center is located in Kuhn Hall. A full-time registered nurse is on duty and medical doctors from the community provide services at stated hours.

The Matthews Technology Building is a new structure that provides facilities and faculty offices for Automotive Technology, Machine Technology, Drafting and Design, and classrooms for other instructional activities.

The College Placement Building is headquarters for the College Placement Services and Alumni Offices. It contains offices, interviewing rooms, and one academic facility—the reading laboratory.

The Police Academy Building is a new structure that houses the Campus Security Office and offices for the director and faculty of the Law Enforcement Department plus specialized classrooms for Academic and Academy programs in law enforcement. A complete photographic laboratory and a criminalistics laboratory are also located in this building.

The Education & Psychology Building was occupied in November, 1977. The building has eight classrooms, eight conference rooms, a psychology laboratory complex, a large lecture hall and offices for both the education and psychology departments.

GENERAL INFORMATION

The Taylor Auditorium opened in the spring of 1975. The theatre seats approximately 2,100 people. Colored padded seats, an excellent acoustical system, and a fine lighting system characterize the theatre. A woodworking shop, a sewing room, a laundry, costume storage, dressing rooms, offices, a green room and four classrooms complete the finest theatre complex in the four state area.

The North Hall houses 200 men. It is an attractive and modern residence hall, completed in the Spring, 1970.

The South Hall was also completed in the Spring, 1970, and will accommodate 110 women.

The Stadium adds a new dimension to the campus. This complex seats approximately 7,500 fans. The field is the only Astro Turf athletic field on any campus in the State of Missouri. This complex also features an all-weather, artificial track.



GENERAL INFORMATION

SCHEDULE OF FEES

Students must pay fees at the regular time of registration each semester or have their registration automatically cancelled. Contractual arrangements for unique hardship problems must be arranged with the Vice President for Business Affairs or his delegated representative prior to registration. Any failure to live up to the contractual agreement also automatically cancels the registration.

The College reserves the right to change fees without notice.

INCIDENTAL FEES

	Each Fall and Spring Semester		Summer Term
	8 Hours or more	Less than 8 hours	
Residents of Missouri	\$175	\$17 per hr.	\$17 per hr.
Non-Residents (Out of State)	\$370	\$27 per hr.	\$27 per hr.

OTHER FEES:

Application for admission	\$ 5.00
Applied music	48.00 per credit hr.
Art Materials	
Ceramic, sculpture	10.00
Jewelry	5.00
Change of class schedule	2.00
Commencement	10.00
Laboratory breakage and materials	cost
Late registration (full time)	10.00
(part time)	5.00
Radiologic Technology special fees	
First Term	100.00
All other terms, each	40.00
Student activity	10.00
Textbook rental and service charge (50% refundable):	
Spring and fall semester (over 8 hours)	30.00
Spring and fall semester (under 8 hours)	
and summer term	6.00 per course
Transcripts	1.00
RESIDENCE HALL COST (Per semester):	\$510.00
Refundable Security Deposit:	40.00

Charges may be paid in full or in four installments per semester. If the installment plan is chosen a ten dollar (\$10.00) administrative charge will be assessed and the following schedule will be observed:

First Semester	Second Semester
August 1	\$130
October 1	130
November 1	130
December 1	130
January 1	\$130
February 1	130
March 1	130
April 1	130

GENERAL INFORMATION

(See detailed explanations below).

Application for Admission: A non-refundable application fee of \$5.00 is charged for processing applications for admission. The payment of this fee should be mailed with the application.

Applied Music: For one 30-minute lesson per week in applied music, the usual fee is \$48.00 per credit hour.

Art Materials: This fee provides for materials such as clay, glazes, waxes, solder, and other similar items necessary for the course projects. Other materials are required to be purchased by students such as paper, brushes, water colors, or oils.

Change of Class Schedule: Students are charged \$2.00 for each class change made after classes begin (refer to College calendar). Students registered for 8 or more credit hours before and after the change in schedule will pay only the \$2.00 fee. Those changing from 7 or less hours to 8 or more hours must pay the full incidental and textbook fees and the \$2.00 change fee. Those who are registered for 8 or more hours and change to 7 or less hours during the change-of-registration week will receive a refund and will be charged by the credit hour.

Commencement: Candidates for the Associate or Baccalaureate degrees are charged a \$10.00 commencement fee. This covers the cost of the diploma, cap and gown, and other commencement activities. The fee is subject to refund only when the candidate fails to qualify for graduation.

Evening Session: Students enrolled in evening classes for regular college credit courses, applicable toward an Associate or Baccalaureate Degree, are subject to the same fees, rules and regulations of the Day Session. Special fees are announced in the Evening Session Bulletin for classes not applicable to an Associate or Baccalaureate Degree.

Laboratory Breakage and Materials: There are no charges for the use of equipment in laboratories. The student will be expected to pay for excessive breakage or loss of equipment due to negligence on the part of the student. A fair actual value of the loss will be determined by school officials. Students will pay for materials used in individual projects. (Example: automotive parts.)

Students enrolled in chemistry are required to purchase a \$10.00 laboratory breakage card which may be redeemed for this full amount at the end of the semester, providing there has been no breakage or loss on the part of the student.

Late Registration: A late registration fee of \$10 is charged full-time students who register after classwork begins. Five dollars is charged part-time students. This fee is not refundable.

GENERAL INFORMATION

Miscellaneous Fees: Occasionally a fee is charged for classroom materials, such as subscriptions to a periodical, line charges for bowling in physical education, film developing in photo-journalism, or purchase of paperback books in addition to the textbook rental.

Student Activity: This charge is to support activities of the Student Senate and the College Union Board. Students enrolled in less than eight hours during a semester may purchase a student activity ticket at the Business Office.

Summer Session: Rules and regulations which govern admission to the first and second semester during the regular school year shall also apply to the Summer Session.

Textbook Rental and Instructional Services: Students enrolled during a semester in eight or more credit hours pay a \$15.00 non-refundable textbook rental fee (includes normal laboratory fees and cost of service on instructional equipment) and a \$15.00 textbook deposit. Students enrolled in less than eight credit hours during any semester pay a \$3.00 deposit and a \$3.00 rental for each course in which they are enrolled. The deposit is refunded when the student has returned all books, materials, and equipment in satisfactory condition. (Books may be purchased at the end of the term for full retail price less an allowance for rental charges paid by the student.)

Transcripts: Each student is entitled to two official transcripts without charge. There is a charge of \$1.00 for each additional copy. Payment must accompany the request for each transcript.

REFUND POLICY (Except for Residence Hall Charges)

Students enrolled in the fall and spring semesters who drop out of the College before the sixth week of the semester are entitled to a partial refund of refundable fees. Refunds for partial drops will be computed using the same percentages. The refund must be claimed during the term for which the refund applies. The refund will be computed as of the date the Registrar receives the withdrawal form completely and correctly executed.

The refund schedule is as follows:

Within the first and second weeks 80 percent refund

From the third thru the fifth week 50 percent refund

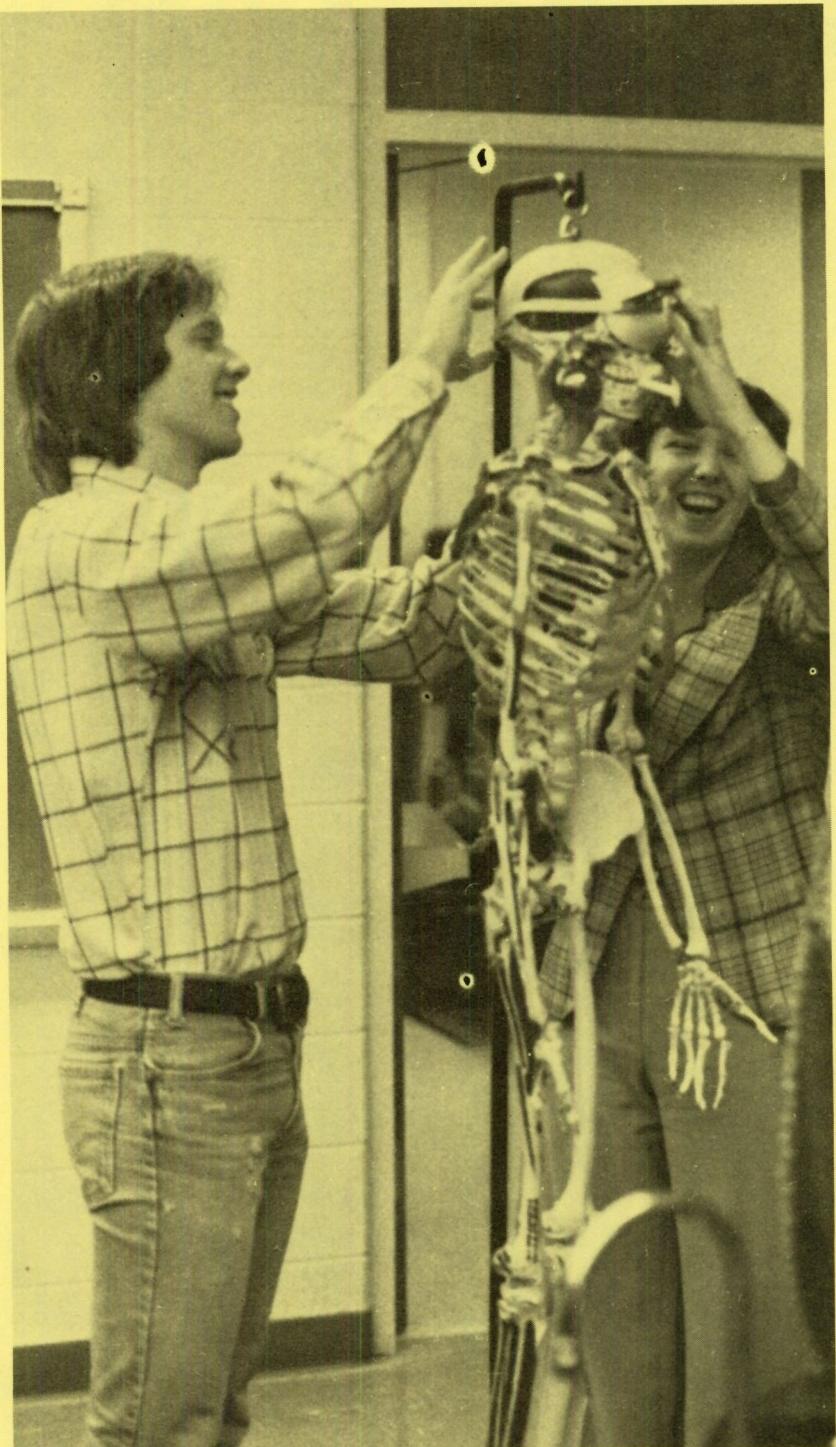
After the fifth week No refund

Refunds for the summer semester are as follows:

Within the first week 80 percent refund

From the second thru the third weeks 50 percent refund

After the third week No refund



STUDENT SERVICES

The maximum intellectual growth and personal development of the college student is a combination of academic study and participation in out-of-class activities. Therefore, the educational program of Missouri Southern State College includes all student-college relations in addition to formal instructions.

The student services are designed to supplement, complement and implement the academic program of the College.

FINANCIAL AIDS

MISSOURI SOUTHERN STATE COLLEGE ACADEMIC SCHOLARSHIPS

General Information

Missouri Southern State College participates in a variety of programs for student assistance. These funds are from all levels: private, institutional, state and federal, which are coordinated to meet the individual student needs.

The "floor plan" of the Federal Assistance Programs is the Basic Education Opportunity Grant. All students applying for aid must file the Basic Educational Opportunity Grant Application Form. Because financial aid is based upon financial need, each student must also file an American College Testing Program Family Financial Statement, as well as the institutional application when applying for National Direct Student Loans, College Work Study, Supplement Educational Opportunity Grants, and Nursing Loans. Students may apply for Federally Insured Student Loans and Veterans benefits. These programs are not issued on a need basis. State and Institutional scholarships are available to students who must complete the appropriate application. These awards are based on various criteria. All programs and awards are coordinated with the Basic Grant to meet the student needs. These funds are awarded without regard to race, creed, national origin, sex, color or handicap.

THE REGENTS AND TRUSTEES SCHOLARSHIP

The President's Scholarships

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college and are administered by the principal of the recipient's high school.

Basis of Selection:

The scholarships are awarded to the first and second ranking students in the eight high schools located in Jasper County.

The Regent's Scholarships

These scholarships are awarded by the Board of Regents and the Board of Trustees of the college directly to the student by the college on the basis of American College Test scores or to Jr. College transfer students on the basis of college hours and level of G.P.A.

Basis of Selection:

The scholarships are awarded to high school graduates who achieve a twenty-three composite score on the ACT taken during a regular scheduled National Test Date.

The scholarships are also awarded to Junior College graduates or Junior College Transfers who have completed a minimum of 55 hours and have a 3.0 or above grade point average.

Missouri Southern State College Patrons' Scholarships

The following scholarships have been made available by interested individual service organizations, business firms, industries, and local civic organizations.

STUDENT PERSONNEL SERVICES

PATRON SCHOLARSHIPS

Donors	Number of Scholarships	Value of Each Scholarship
AAUW-Dorothea Hoover Memorial	1	\$360
Anonymous No. 1	5	\$200
Anonymous No. 2	2	\$250
Anonymous No. 3	1	\$200
Anonymous No. 5	1	\$100
Anonymous No. 6	1	\$200
Anonymous No. 8	1	\$250
Auxiliary Jasper County Medical Society	3	\$200
Bank of Carthage	1	\$200
Russell Belden Memorial	4	\$200
Briarbrook Men's Gold Association	1	\$300
Mr. & Mrs. Claude Boyd	3	\$200
Bob Chaplin Memorial	1	\$200
Citizens Bank of Carl Junction	1	\$350
William H. Clark Memorial	1	\$200
Ada Coffey Memorial	2	\$150
Commerce Bank of Joplin	1	\$200
Community National Bank of Joplin	1	\$100
Frank Croddy Memorial	1	\$100
Dickinson Foundation	4	\$200
Downtown Joplin Association	1	\$350
Edna Drummond Memorial	10	\$300
Dr. Lloyd Dryer	1	\$100
Larry Dunham Memorial	1	\$200
Electric Motor Supply	1	\$225
Empire District Electric Company	10	\$350
Engineering-Math-Physical Science	1	\$200
Fifteenth Street Lumber Company	2	\$300
First Community Bancorporation	5	\$400
First National Bank of Sarcoxie	1	\$400
First State Bank of Joplin	1	\$200
Forty and Eight	1	\$100
Gilmarbeck Music	1	\$200
Mr. & Mrs. Harry Gockel	1	\$200
Shirley Gollhofer	1	\$150
Charles A. Green Memorial	1	\$100
Joe Harding Supply Company	1	\$200
Harlan-Mosler Memorial	1	\$100
Harrison G. Harper Memorial		
Hercules Incorporated	2	\$250
Robert Higgs Memorial	1	\$200
Holiday Inn Executive Secretary Club	1	\$200
Henry Hornsby Memorial	2	\$250
Mrs. Dorothea Hoover Memorial	1	\$200
Mr. & Mrs. Fred Hughes	2	\$250
C. C. Ivie Memorial	1	\$100
Jasper County Medical Society	2	\$200
Mr. & Mrs. Alton Jones	2	\$300
Joplin Area Association of Retarded Citizens	4	\$210
Joplin Association of Educational Secretaries	1	\$100
Joplin Board of Realtors	2	\$200
Joplin Association for Childhood Education	1	\$200
Joplin Business & Professional Women's Club	2	\$200

STUDENT SERVICES

Joplin Centennial Scholarship	1	\$350
Joplin Downtown Lions Club	1	\$300
Joplin Exchange Club	1	\$100
Joplin Federal Savings & Loan Association	1	\$300
Joplin Rangeline Lions Club	1	\$240
Joplin Rotary Anns	2	\$300
Joplin Rotary Club	6	\$200
Joplin Tri-State Chapter-Nat'l. Assoc. of Accountants	1	\$300
Joplin White Trucks, Inc.	1	\$250
Joplin Women of Kiwanis	1	\$200
KOAM-TV	1	\$300
KODE-TV	1	\$350
KQYX-KSYN	1	\$210
Kiwanis Foundation of Joplin	2	\$200
Dr. J. R. Kuhn, Jr.	3	\$200
Arthur Kungle, Sr.	6	\$350
Harry H. Landreth Memorial	1	\$200
Jack F. McCracken Memorial	1	\$300
Merchants & Miners Bank-Webb City	1	\$200
Mid-Western Machinery Company	3	\$200
MSSC Faculty Wives	1	\$400
Martha Brown Mote Memorial	1	\$200
Samuel L. Murto Memorial	1	\$225
Carol Newton Memorial	1	\$400
Florence Nightingale	1	\$200
Ralph Nolan Memorial	1	\$200
Northpark Lions Club	1	\$100
Edward S. Phinney Memorial	1	\$300
Pilot Club of Joplin	1	\$430
Tricia Nicole Rainey Memorial	1	\$250
Anna Marie Redden	1	\$230
L. R. Reynolds, Jr. Memorial	1	\$215
Rho Eta No. 185 of Joplin	1	\$100
Roper Pontiac Incorporated	1	\$350
Dr. George Schaefer	1	\$350
William H. Sisk Memorial	1	\$400
Roland T. Smith, M.D.	1	\$100
Soroptimist Club of Carthage	1	\$270
Soroptimist Club of Joplin	1	\$200
Southtown Meat Company	1	\$200
Southern Missouri Distributors, Inc.	2	\$200
George A. Spiva Memorial	1	\$500
Harry Spradling Memorial	1	\$200
St. John's Medical Center Auxiliary	1	\$350
Dan L. Stanley Memorial	1	\$200
Vera Steininger Memorial	1	\$200
Dorothy Stephenson Memorial	5	\$200
Student National Education Association	1	\$100
Thomas E. Taylor Memorial	1	\$100
Dr. A. Paul Thompson	1	\$200
Tri-County Pharmaceutical Representatives	1	\$350
Tri-State Interior System, Inc.	1	\$200
United Missouri Bank of Carthage	1	\$200
United Missouri Bank of Joplin	1	\$200
Art Watkins Scholarship-Golf	1	\$200
Dennis Weaver	2	\$250
Webb City Area Jaycees	1	\$200
Webb City-Carl Junction Rotary	2	\$200

STUDENT SERVICES

Christine Webster Memorial	1	\$100
Western Jasper County Medical Health Association	2	\$200
Erma H. Whitaker Memorial	1	\$200
Dr. & Mrs. John Windle	1	\$200

SPECIAL AWARDS

Edward S. Phinney Memorial Scholarship: This memorial scholarship has been established to honor the late Dr. Edward S. Phinney, Vice President for Academic Affairs. Dr. Phinney was Dean of the College from 1967 to 1973. The scholarship will be given each year to a student who has achieved academic excellence while attending Missouri Southern State College.

Edna C. Drummond Memorial Scholarship: The intent of this scholarship is to give appropriate recognition for academic excellence and for the purpose of assisting students in the science department. The number of scholarships awarded each year varies. Miss Drummond was a former instructor of Joplin Junior College from 1938 to 1955.

Spencer F. Bartlett Respect Award: The intent of this award is to give special recognition to a graduating male and female student who has the greatest respect for God, U. S. of America, and has maintained average grades or better while attending Missouri Southern State College. The amount of the award varies each year.

PERFORMING AIDS & AWARDS

Awards are made to individuals who have demonstrated success or high potential in basketball, football, music, dramatics, math, forensic, golf, baseball, track, and journalism. These individuals must show satisfactory progress in these college performance areas in order to continue the aid. Applications for performing aids should be made to the director or sponsor of the particular activity.

Director of Theatre	Baseball Coach
Forensic Director	Basketball Coach
Director of Math League	Football Coach
Director of Music Activities	Golf Coach
Director of the School Paper (Chart)	Track Coach
Director of the School Yearbook (Crossroads)	

For women's activities write directly to the Director of Women's Athletics.

BASIC EDUCATIONAL OPPORTUNITY GRANT (BEOG)

The Basic Educational Opportunity Grant Program is a Federal Aid Program designed to provide financial assistance to those who have a financial need. Basic Grants are intended to be the "floor plan" of financial assistance, and may be combined with other aid programs to meet the full cost of education. Each student must fill out the "Application for Determination of Basic Grant Eligibility." After processing the application, Basic Grant will send a "Student Eligibility Report" to each applicant. Upon receipt of the "Student Eligibility Report," the student must take the report to the Financial Aid Office where the amount of the Grant will be determined. Students will receive one half of their Basic Grant each semester.

STUDENT SERVICES

EDUCATIONAL OPPORTUNITY GRANTS - (EOG)

Missouri Southern State College has funds for a limited number of Educational Opportunity Grants. Under this program grants may be awarded to students with exceptional financial needs.

Students who have received EOG funds in prior semesters at Missouri Southern State College or other institutions will be given preference. This type of financial assistance must be matched with other types of aid such as scholarship, work, or loans.

LAW ENFORCEMENT GRANTS

Law Enforcement Grants are designed to provide financial assistance to Law Enforcement majors seeking a degree. Funds are awarded by priority listing established by LEAA. No financial need test is required.

NURSING GRANT

Nursing Grants are available to Nursing majors who have been officially accepted into the Nursing Program. Funds are distributed on financial need basis, thus students must complete the American College Testing Program Family Financial Statement and demonstrate financial need.

ROTC Scholarships

Under the provisions of Public Law 88-647 a limited number of one-year, two-year and three-year ROTC scholarships are available for award to outstanding students enrolled in Military Science. These scholarships provide for payment of tuition, fees, book costs, laboratory expenses and subsistence pay of one hundred dollars (\$100) per month. Selection of individuals will be based on criteria established by the Secretary of the Army and by action of an on-campus board consisting of the Professor of Military Science and other representatives from the faculty.

ROTC Advanced Program

Students who qualify for the Advanced ROTC Program receive one hundred dollars (\$100) per month during the school year their Junior and Senior year. For information concerning this program contact the Military Science Department.

WORK

Student Employment

The college Student Employment program is a work program set up by the college to assist those students who desire employment while attending school. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during the vacation periods. Preference is given to those students who are qualified to fill the job openings and have had experience in fields related to the job openings. Employment is on campus only.

Federal Work-Study Program

The Federal Work-Study program is a program whereby students who must have a job to help pay for college expenses may be employed by the college or certain other non-profit agencies. Preference must be given to students from low-income families. In this program students may work 15 hours a week while attending classes and up to 40 hours a week during summer and other vacation periods when they do not have classes.

LOANS

Nursing Loan

This program has been established to assist those students who wish to complete requirements for nursing. Maximum amount loaned per year is \$2500. These

STUDENT SERVICES

loans are given at three percent (3%) interest. Interest begins nine months after the students leave school. This loan has a cancellation clause. (See Financial Aids Office.)

Law Enforcement Loan - (LEEP)

This program has been established to encourage students to enroll in the Law Enforcement Program. These loans carry an interest rate of seven percent (7%) with special consideration given to law enforcement officers who are presently employed full-time. This loan has a cancellation clause.

National Direct Student Loans - (NDSL)

High school graduates who are accepted for enrollment at Missouri Southern State College and who need financial assistance to pay enrollment fees and other costs are eligible for student loans. The loans bear no interest until nine months after the student ends his studies. This applies whether the individual remains a student at Missouri Southern State College or transfers to another institution. Nine months after the student ceases his studies the unpaid balance of the loan begins to draw interest at the rate of three percent (3%) per year. Repayment of the loan may be as low as \$30.00 per month and, depending on the amount of the loan, may be extended over as much as a ten-year period. Repayment of these loans may be deferred up to a total of three years while a borrower is serving in the Armed Forces, with the Peace Corps, or VISTA.

FEDERALLY INSURED STUDENT LOANS (FISL)

Federally Insured Student Loans are processed through the Financial Aids Office and approved through local lending institutions. Full time students with an adjusted income of less than \$15,000 qualify for the loan program. Students with adjusted incomes over \$15,000 may qualify for the loan but, would not receive the interest benefits it provides. The loan amount is established by the lending institution up to a maximum of \$2,500 per academic year. The Federally Insured Student Loan differs from the National Direct Student Loan in that approval comes directly from the lending institution and the interest rate is 7%. Repayment procedures are identical to the National Direct Student Loan in that the interest and payments begin nine-months after the student graduates from school. Applications are available in the Financial Aids Office.

SHORT TERM LOANS

Students presently enrolled full time, or who have been accepted for admission, may apply for short term loans to assist with tuition and fees. The amount of the loan may not exceed 50% of the students tuition and fees. Applications for short-term loans should be submitted to the Financial Aids Office a minimum of two weeks prior to the date of registration. All loans are due by the eighth week of the semester (fourth week of the summer term).

All qualified applicants for short-term loans will be considered without regard to race, color, creed, sex, or national origin.

Small, Short-Term Loans

- David Pearl B'nai B'rith Loan Fund
This fund was established in memory of David Pearl, a member of the above fraternal organization.
- Mitchell Loan Fund
This fund was established in memory of Thomas Mitchell.
- Joplin Business and Professional Women's Club Loan Fund
This fund was established to assist students in need.
- Arnold E. Irwin Loan Fund
This fund was established to assist students in need.

STUDENT SERVICES

- Arnold E. Irwin Loan Fund
This fund was established in memory of Mr. Irwin who was a faculty member of Joplin Junior College.
- Patricia Smith Memorial Loan Fund
This loan fund was established in 1969 in memory of a former Missouri Southern State College student by the Joplin Exchange Club and friends.
- Edna F. Gaither Memorial Fund
This fund was established in memory of Edna F. Gaither who was a teacher in the Joplin school system for 50 years.
- Joplin Life Member Club Telephone Pioneers Loan Fund
This fund was established to assist students who need financial assistance for the academic year.
- Joplin Rangeline Lions Club Emergency Loan Fund
This fund was established to help students who have an emergency. These funds are available immediately and were provided by the Lions Club so that the problems of finance would not be a part of the student's emergency.
- Dan Howard Memorial Fund
This fund was established to assist students in need who are studying in the fields of Nursing, Pharmacy, Optometry, and Medicine.

How To Apply For Financial Aid

1. Complete the Basic Education Opportunity Grant. When the three copies of the Student Eligibility Report are received, bring them to the College Financial Aid Office.
2. If applying for work, loans, and grants, complete the American College Testing Program Family Financial Statement and the College Financial Aid Application.
3. Applicants for Federal Insured Student Loan Program should complete the Federal Application and contact a local lending institution.
4. Applicants for financial aid must have completed a satisfactory financial aids program well in advance of each semester's registration and have on file in the Financial Aids Office all forms pertaining to the type of aid requested.

For further information regarding financial aid:

Office of Financial Aid
Missouri Southern State College
Newman & Duquesne Roads
Joplin, Missouri 64801
417-624-8100

On Campus Residency Requirements

"All freshmen and sophomore men and women are required to live in the Missouri Southern State College Residence Halls to the extent available, unless they are married, live with their parents, live with a relative (by blood or by marriage), or are excused by the Dean of Student Affairs."

Residence Facilities

Limited college residence facilities are planned for those who are enrolled as full-time students in Missouri Southern State College.

Two permanent residence halls, one with accommodations for 200 and one with accommodations for 110, are available. They are located at the heart of the campus near the new College Union, the library, classrooms, and the gymnasium.

The large first floor lounge and recreation areas are the central features of each building. Each room will have beds, closets, built-in desks and desk chairs. Coin operated laundry facilities are available in the Halls. Private telephones may be installed in each room with the occupants assuming responsibility for the installation charges plus the monthly telephone bill.

STUDENT SERVICES

Contractual Arrangements for Residence Halls

An application and contract accompanied by a \$40 security deposit fee is required for reservation in a College Residence Hall. This is a combined contract for room and meals. The \$40 security deposit is forfeited if the contract is cancelled after July 31 for the fall term, or in case of new students, after December 31 for the spring term. The College retains the \$40 as a security deposit as long as the student is in residence and this deposit is not applicable to the housing account. The deposit will be refunded upon termination of the contract if all terms of the contract are fulfilled.

This contract is effective for the entire academic year (fall and spring semesters); or is effective for the remaining portion of the academic year when entered into after the beginning of the fall term.

A student may request cancellation of the contract at the end of a term because of completion of graduation requirements or if an emergency beyond his control necessitates his withdrawal from school. If this request is filed with the Housing Director at least before the end of the term, and if approved, the deposit may be refunded unless there is a damage charge, outstanding account, or other violation of the contract. Students should refer to contract for detailed terms.

The College reserves all rights in connection with room assignments which are made in the order in which applications are received. Students' preferences are considered, but there can be no guarantee that assignments will be made in accordance with the preferences.

The residence halls and food services are operated on a non-profit basis by the College, and the established rates are subject to change by action of the Board of Regents. Twenty meals are served each week.

Residence hall rooms may not be occupied by students earlier than 24 hours before they are required by the College to be in attendance. Students are to vacate rooms 24 hours after the term officially closes.

Reservations in residence halls are not held beyond 36 hours after the student is required to be on campus unless special arrangements have been made with the Housing Director.

The College is not responsible for the loss of, or damage to, any personal property of students. Parents should arrange for insurance coverage of personal property within the framework of their regular household policies.

College Union

The College Union is a social, cultural, recreational, and service center for student, faculty, and alumni. The activities in this building are planned and directed by the College Union Board.

On the ground floor are located various offices, the bookstore, the lounge, and a snack bar.

The ballroom and special meeting rooms are located on the upper level of the College Union.

The cafeteria, the faculty lounge, and the food service offices are located on the main floor. An elevator connects the three floors.

Social Standards

A student attending Missouri Southern State College is expected to maintain a high standard of moral conduct. Forfeiture of the privilege to attend may result from unsatisfactory conduct. Students are expected to demonstrate maturity in their judgment.

Appropriate dress is expected on the campus during the regular school day. Missouri Southern State College does not permit the use of alcoholic beverages on campus. Any violation to this rule is subject to disciplinary action.

Smoking is prohibited in the library and classrooms.

STUDENT SERVICES

Career Counseling and Placement Services

The Placement Office, usually associated with the task of matching people and jobs, offers an equally important service through career counseling, aiding students in clarifying their educational and vocational objectives. An understanding on the part of the student of his interests, aptitudes, limitations, etc. and a knowledge of the world of work makes matching an individual's qualifications with a job much easier and certainly more gratifying to all parties concerned. Students are invited to use career counseling and placement services early in their pursuit of a formal education.

Although Missouri Southern State College is considered to maintain centralized placement services, the Placement Officer coordinates the functions of his office with other guidance and counseling services available to students on campus. The services more specifically related to finding employment are centered in the Placement Office.

A collection of information folders supplied by major business establishments, industries, governmental agencies and educational institutions are made readily accessible in the Placement Office Library. A record of current information on job opportunities and announcements of on-campus interviews is either posted on bulletin boards or bound in notebook form for student use. Students are invited to visit the Placement Office regularly.

Candidates for graduation must register with the Placement Office. Registration involves answers only to several basic questions. Since employers usually request credentials of a potential employee before making final judgment on their selection, most graduates will want to develop a set of credentials for the Placement Office files. The Placement Office personnel provide assistance in the development of credentials. Credentials are retained in the Placement Office files indefinitely and may be updated, declared inactive or activated only by the student upon written request.

Student Health Center

A Student Health Center is available and is staffed with a full-time registered nurse and the services of a physician are available upon call. This new facility was designed with the latest health techniques in mind.

The out-patient clinic hours are from 8:00 a.m. to 4:00 p.m., Monday through Friday during the regular school year. No charge will be made for service during these hours but students are expected to pay for prescriptions, medications, diagnostic tests, ambulance service or minor surgery, except where covered by any insurance the student or his family may have. The College reserves the right to adjust benefits to the students within the limits of the funds made available for the health services through incidental fees paid by students.

Student Insurance

A voluntary accident and sickness insurance plan for students in Missouri Southern State College is available. It is designed as a supplement to the health services already offered to all full-time students through the Health Center. This voluntary insurance program also covers emergencies and provides further protection while the student is away from the campus on weekends or on vacation, including the summer months.

Counseling and Testing Center

The Counseling and Testing Center is located in the Student Personnel complex on the first floor of Hearnes Hall. The services of the Center are available without cost to Missouri Southern State College students.

Assistance is offered the student in dealing with academic, vocational and personal decisions which may help the student to realize his or her potential.

A library of career and vocational information is available to the student as well as information about graduate schools. Vocational interests and aptitude tests are available without charge to students of the college.

STUDENT SERVICES

Information and/or registration forms are available for many national tests (i.e. Graduate Record Exam (GRE), Medical College Admission Test (MCAT), Graduate Management Admission Test (GMAT).

The Center serves as a national test center for the College Level Examination Program. CLEP. Information and registration for college credit by examination is available from the Center.

Veterans

All courses listed in the Missouri Southern State College Catalog are approved for benefits administered through the Veterans Administration under Section 1775, Title 38, U. S. Code. Veterans or dependents wishing to apply for Veterans benefits should contact the Veteran Affairs Office for assistance.

Student Activities

Opportunities for participating in a wide variety of out-of-class activities are provided at Missouri Southern State College. Students are encouraged to investigate the wide choice of activities and are invited to participate in one or more of these aspects of the College program.

Student Senate—The responsibility for student government rests not only with the student officers and student boards and committees but also with each member of the student body. The growth and development of Missouri Southern State College student government will be proportionate to the participation by the students.

The Student Senate serves as the governing body for students and acts as an intermediary between the faculty and student body. Members of the Student Senate gain experience in the functions of a student government and strive to promote the objectives of the Student Body Constitution.

The membership of the Student Senate consists of the Student Body Executive Officers, the officers from each class, and a number of senators representing each class. The student body executive officers for the summer cabinet for the following year are elected late each spring. The class officers and student senators are elected early each fall. Interested students petition and campaign for office.

College Union Board—The activities in the College Union are planned and directed by the College Union Board. The College Union Board, composed of seven students and three faculty members, serves as an advisory board to the College Union Director.

The College Union Board began functioning in September, 1969. The Union Board has four major committees: cultural affairs, forum, recreation and films, and dance. The College Union Director, with the aid and advice of the College Union Board, attempts to provide varied activities for the student body.

Students serving on the College Union Board are elected each spring. Qualified students are urged to file for election to these offices. The Dean of Women, Dean of Men, and one faculty member, appointed by the Dean of Student Personnel Services, complete the ten member board.

STUDENT ORGANIZATIONS

The College encourages student organizations which provide for the professional, social, academic, divisional, religious, political, or service interest of the students. New organizations may be established when approved by the Student Government and the College Administration.

Student Government

Student Senate
College Union Board

Honor Groups

Alph Psi Omega
Pi Gamma Mu
Pi Omega Pi

STUDENT SERVICES

Classes

Senior Class
Junior Class
Sophomore Class
Freshman Class

Departmental Groups

Art League
Association for Childhood Education
Association of Women Students
Beta Beta Beta
Chi Epsilon Phi
College Players
Computer Science League
Epsilon Gamma
Industrial Technology Club
Kappa Mu Epsilon
Lambda Epsilon Epsilon
Letterman's Club
Modern Language Club
MSSC Jr. Chapter-American
Dental Hygienists Association
MSSC Music Educators National
Conference
MSSC Student Chapter of Council for
Exceptional Children
Missouri Southern Student Education
Association
Omicron Delta Epsilon
Pershing Rifles

Departmental Groups (Cont'd.)

Rho Epsilon Chi (Phys. Ed.)
Society for the Advancement of
Management
Sociology Club
Student Nurses Association

Religious Organizations

Baptist Student Union
Ecumenical Campus Ministry
Koinonia

General & Service Organizations

Afro-American Society
Chess Club
Cheerleaders
Council on International Relations
& United Nations Affairs (CIRUNA)
MSSC Veteran's Organization
Young Democrats Club
Young Republicans Club

Social Fraternities

Kappa Alpha
Sigma Nu

Social Sororities

Delta Gamma
Lambda Beta Phi
Panhellenic Council
Zeta Tau Alpha

STUDENT INTERESTS

Athletics—Missouri Southern State College, having become a four-year institution as defined by athletic associations, has received membership in the National Association of Intercollegiate Athletics and Association for Intercollegiate Athletics for Women. The college participates in intercollegiate athletics for both men and women.

To be eligible for participation, students must meet the scholastic requirements of the NAIA and AIAW.

The Chart staff publishes a bi-weekly college newspaper as a laboratory experience for students in journalism classes. Throughout the year the editorial division uses the work of many reporters, feature writers, cartoonists, and typists. The business staff offers experience in advertising, salesmanship, and secretarial practices. Free-lance work is accepted, and those wishing to free-lance should visit The Chart Office.

The Crossroads (The College Yearbook) is produced by a student staff with faculty sponsors. Students gain valuable practical experience in photography, copy writing, layout and design, business management and public relations. Staff members are involved in creatively covering every aspect of campus life. The staff is open to all interested students.

Debate—A forensics program featuring college debate offers opportunities to any student interested in argumentation. An intercollegiate debate team was first organized in the fall of 1970.

Music—Participation is available for all qualified student in Choir, Vocal Ensemble, Marching Band, Concert Band, Stage Band, Brass Choir and Orchestra with instructors consent.

STUDENT SERVICES

Theatre—The theatre department sponsors four major drama productions in the campus theatre for which all MSSC students are eligible to try out. Advance announcement is made before each try-out. In addition to the major productions, there are experimental and reader's theatre presentations and performing workshops. Sponsored by the local chapter of Association for Childhood Education and presented by the speech and drama department, a series of children's plays are presented each year at the local junior high schools. Try-outs for these are open to every full time MSSC student in good academic standing.

The Winged Lion is a creative arts magazine featuring student contributions in art and literature. This student-edited publication provides a creative outlet for students and is published once each fall and spring semester. Opportunities exist for those interested in editing and publishing as well as in creative contribution.



ACADEMIC REGULATIONS

ADMISSION AND EVALUATION OF TRANSFER CREDITS

1. Admission Direct from High School.

A. Residents of Missouri. Any resident of Missouri who, (a), is a graduate of an accredited high school, (b) has participated in the American College Testing Program, (c) presents a history of his health (form provided), and (d) pays a \$5 non-refundable application fee, is eligible for admission to Missouri Southern State College.

B. Non-Residents of Missouri. A non-resident of Missouri in order to be eligible for admission to study as a first time freshman, (a) must be a graduate of a high school accredited by the Regional Association or by an appropriate accrediting agency of his home state, (b) must have participated in the American College Testing Program or a similar acceptable battery of tests, or, (c) have a composite score of 15 on the American College Test, (d) must rank scholastically among the upper two-thirds of the members of his graduating class, (e) must present a history of his health, (forms provided), and (f) must pay a \$5 non-refundable application fee.

2. Admission as a Transfer Student.

Students transferring from another collegiate institution, (a) must have official transcripts sent to the Director of Admissions by the Registrar from each institution attended, (b) must be eligible to return to their last institution, (c) must present a history of his health, (forms provided), and (d) must pay a \$5 non-refundable application fee. Students seeking admission from other colleges with 55 transfer credit hours or more, must present a minimum C (2.0 on A=4) average.

Transfer students must also take the senior year or 30 out of the final 36 hours in residence at Missouri Southern State College.

3. Special Admission.

A Missouri resident, 21 years of age or over, who has not graduated from high

school may be admitted on a probational basis. A student admitted under this regulation must make a "C" average over his first semester's work to be eligible to return for the second semester.

4. International Students.

Students not citizens of the United States, who wish to apply for admission, should write the Director of Admissions, Missouri Southern State College, for the proper application forms and instructions. Three basic concerns apply to international student applicants: (1) Academic competency; (2) Ability to read and speak the English Language adequately for college level study; and (3) Ability to finance the cost of education at Missouri Southern State College. All applicants from non-English speaking countries must pass the Test of English as a Foreign Language.

5. Credentials Required for Admission.

Students with no college experience are required to furnish credentials as follows for admission to the freshman class:

A. High School Transcript. An official transcript of high school credits showing that he has met requirements for graduation.

B. Application. The application for admission must be completed one week before the first day of registration (see college calendar).

This includes all credentials required by the admissions office.

C. Application Fee. A fee of \$5 with the application for admission. (This fee is non-refundable and non-applicable to other college fees.)

D. Medical History. A statement of medical history must be filled in by the student.

E. Missouri Southern State College will require additional credentials from students whose application credentials raise questions about their acceptability

ACADEMIC REGULATIONS

into the student body. While the college makes every effort to give each applicant an opportunity for a college education, it reserves the right to deny admission when the College's ability to meet the need of the student and/or the welfare of the student body are in question.

F. Students who do not attend Missouri Southern State College within one year after making application, must submit new credentials when seeking admission again.

G. Admission to Missouri Southern State College does not automatically confer admission to the nursing program, radiologic technology, dental hygiene, etc. In addition to meeting the admission requirements for the College, candidates who are interested in these health career programs are required to apply for admission to the department. Application forms may be obtained from the Department of Nursing Office, Kuhn Hall, the Radiology Department of St. John's Medical Center or the Dental Hygiene Department Office. Applications should be submitted prior to May 1, preceding the Fall Semester during which you wish to enter. Each application is reviewed by the Admission Committee of the respective department. See nursing department page 135, dental hygiene department page 92 or radiologic technology under affiliated programs for full information on admission and acceptance criteria.

H. Veterans who plan to attend under the G.I. Bill of Rights or Veterans' Orphans Act must present a certificate of eligibility at the time of registration.

Students transferring from other colleges must present the regular credentials listed above for freshman plus official college transcripts and statements of honorable dismissal from each institution attended after high school graduation.

Former Missouri Southern State College, Junior College of Jasper County, and Joplin Junior College students must inform the Office of Admissions of their intention to return. When necessary, these students will be required to update their credentials.

6. Placement Tests.

Missouri Southern State College participates in the American College Testing Program. Scores from this test battery must be presented, within three years from the time the test was taken, as an admission credential. These tests are administered at Nationally approved test centers five times a year. Missouri Southern State College is a test center.

7. Report of Medical History.

Each student enrolling at Missouri Southern State College for the first time, regardless of academic classification, must file a report of medical history. This "history" must be reported on the form provided by the office of Health Services.

8. Resident Credits from Institutions of Equal Standing with Missouri Southern State College.

Credits transferred from accredited colleges will be given full value in similar courses whenever possible. The amount of credit given for courses studied in other institutions may not exceed the amount given at Missouri Southern for the same length of time of instruction. Students may not transfer credits to satisfy more than one-half the major course requirements for a department unless he has the approval of the Vice President for Academic Affairs.

9. Transfer of Resident Credits from a Junior College.

Credits will be accepted by transfer from a junior college to meet lower division requirements only. This means that students will not receive credit by transfer from a junior college for more than 64 hours. A minimum of 60 semester hours must be earned in a senior college. Upper division courses carrying a grade of D will not be accepted for credit at Missouri Southern State College. Transfer students must also take the senior year or 30 out of the final 36 hours in residence at Missouri Southern State College.

ACADEMIC REGULATIONS

10. Correspondence and Extension Credit.

Missouri Southern will accept a maximum of twelve semester credit hours earned through correspondence and/or extension from another institution if that institution is fully accredited. A current student may not enroll in a correspondence course without prior approval of the Vice President for Academic Affairs.

11. Advanced Standing Examinations.

A student whose travel, employment, extensive readings or other unique educational experiences appear to have given him proficiency in a course required in his curriculum equivalent to that ordinarily attained by those taking the course in regular class, may be granted permission to take an advanced standing examination. This examination may be a subject matter test of the College Level Examination Program (CLEP) or a comprehensive test designed by the department to cover the subject more fully than a regular final examination.

In addition to having the above qualifications, a student in order to receive credit for an advanced examination must:

- A. Be enrolled in college at the time of the examination;
- B. Not have taken an examination over the course within the preceding six months;
- C. Not have credit in a more advanced course in the same field;
- D. Be working toward a degree at Missouri Southern State College;
- E. Have the approval of the head of the department in which the course is offered.

Students may initiate an examination in the CLEP Program by contacting the Director of Testing and Guidance. A student may initiate a departmental test with the head of the department.

After the student has taken the CLEP Examination, the test will be graded in Princeton, New Jersey. Scores will be sent to both the Vice President for Academic Affairs and the student. If

performance is equated as a "C" grade, the Registrar will record the credit.

After a student has taken a departmental examination, the professor will transmit the grade to the Vice President for Academic Affairs Office. If performance is equated as a "C" grade, the Registrar will record the credit.

12. Validation Examinations.

A student who has earned credit in a course which Missouri Southern State College refuses to accept because of the method in which the course was taken, or because the institution at which the course was taken was not accredited, may apply for a validation examination. In order to qualify for a validation examination, a student must:

- A. Be enrolled in college at the time he takes the examination;
- B. Present the necessary evidence to prove that he has taken the course;
- C. Get approval from the Registrar, the Division Dean and the Head of the Department in which the course is offered to take the examination;
- D. To initiate the proceedings within the first eight weeks after entering college.

The student initiates his request for examination at the Registrar's Office. The Division Dean and the Department Head will appoint a professor to construct, administer, and evaluate the examination. The result is reported to the Registrar who records the grade if it is "C" or above.

GENERAL REQUIREMENTS FOR GRADUATION

13. Catalog Used as a Basis for Degree Requirements.

A candidate for a degree may use as a basis for degree requirements the general catalog issued for any year following the date of his first registration in the college, so long as it is not more than five years prior to the date the degree is to be conferred. The candidate must have been in residence during the year of the catalog selected. The degree requirements in this catalog, 1978-80, become effective June 1, 1978.

ACADEMIC REGULATIONS

14. Degrees.

<u>Major</u>	<u>BA</u>	<u>BS</u>	<u>BSBA</u>	<u>BSED</u>	<u>*BGS</u>	<u>Other</u>
Accounting			X			Associate
Art	X			X		Associate
Automotive Technology			X		X	Associate
Biology		X		X	X	Associate
General Business			X	X		Associate
Chemistry	X	X			X	Associate
Computer Science						
Criminal Justice Administration		X				
Dental Assisting						Certificate
Dental Hygiene						Associate
Drafting & Design						Associate
Economics & Finance				X		
Elementary Education					X	
English	X	X			X	
Environmental Health		X				Associate
History	X				X	
Industrial Arts Education					X	
Law Enforcement						Associate
Machine Technology			X			Associate
Management Technology				X		
Marketing & Management				X		
Mathematics	X				X	
Medical Technology		X				
Music	X				X	
Nursing						Associate
Office Administration						Associate
Physical Education					X	
Physics			X		X	
Political Science	X					
Pre-Agriculture						Associate
Pre-Dentistry						Associate
Pre-Engineering						Associate
Pre-Journalism						Associate
Pre-Medicine						Associate
Pre-Optometry						Associate
Pre-Pharmacy						Associate
Psychology	X		X			
Psychology-Special Education		X			X	
Radiologic Technology						
Secretarial Science						
Social Science					X	
Sociology	X	X				
Spanish	X				X	
Speech & Theatre	X				X	

*This program designed for the student who finds that the present degree program (Majors) at the College will not enable him/her educational objectives. The program may or may not prepare a student for a particular occupation or entry into a professional school. Students should see the Registrar for full particulars on the program.

ACADEMIC REGULATIONS

15. Baccalaureate Degrees.

A. Residence—The student must have earned thirty out of the final thirty-six semester hours in residence at Missouri Southern State College. (This regulation does not apply to three-one affiliation programs.)

B. Credit Hours—At least one hundred twenty-four semester hours of college credit applicable to a baccalaureate degree are required to qualify for graduation.

C. Grade Point Average—A 2.0 cumulative grade point average on all credit hours attempted is required. The courses making up the major field of study must also carry a 2.0 or above. See the Department of Education for the special requirements in the Teacher Education Program.

D. Upper-Division Hours—A minimum of forty semester hours in upper division courses (those with numbers in the 300's and 400's) must be presented to meet the graduation requirements. Reasonable adjustments are made for three-one affiliation programs.

E. Time of Graduation—A student may complete graduation requirements at the close of any semester. Formal announcement of graduation is made and degrees are conferred at the close of the spring semester. All students completing graduation requirements since the preceding commencement are expected to participate in the commencement activities.

F. Major Field—A minimum of 12 upper division credit hours must be earned in the major field. The grade point average for courses making up the major must be 2.0 or above. A minimum of 15 semester hours must be taken at Missouri Southern State College.

G. Placement Services—Each degree candidate must register in the Placement Office.

H. Degree Candidacy Application—Each student must make application for degree candidacy when registering for his final semester in the school year in which he is to receive his

degree. The application form is available in the office of the Registrar.

I. Educational Methods Course—These courses, including student teaching, are applicable only to the Bachelor of Science in Education degree.

J. Correspondence and Extension Credit—A maximum of twelve semester hours of correspondence and extension credit may be considered for admission to the degree.

K. State Legislation Requirements—Sections 10373, 10374, 10374a, 10374b, 10374c (S.C.S. for S.B.4) of the Laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or (2) by certification of the completion of such requirements in another collegiate institution.

All students who have completed the general education curriculum requirements in Area 4 meet the requirements of Missouri law. Out of state students who do not take Area 4 at Missouri Southern State College must pass a special examination on the new Missouri Constitution.

L. General Education Requirements—Missouri Southern State College has a program of General Education that contributes toward the development of the whole person, as an individual and as a member of society.

To accomplish this goal, the student pursues a carefully planned and correlated program of courses. The courses selected to fulfill the General Education requirements:

- (1) improve skills of communication and mathematical proficiency;

ACADEMIC REGULATIONS

- (2) give an understanding of leading intellectual ideas of western civilization;
- (3) create an appreciation of our cultural and political heritage;
- (4) emphasize responsibility as a citizen;
- (5) aid in the development of creative and independent thought and expression;
- (6) provide knowledge and understanding of the physical universe;
- (7) develop awareness of the importance of health and physical fitness; and
- (8) afford experiences conducive to the development of strong character and personality.

BACCALAUREATE DEGREE

Area 1. Basic Requirements

		Credit Hours Required
A. English Composition (Eng. 101 and 102) (or achievement of the required competency level which can be done in 3 hours (Eng. 111) or as many as 11 hours (Eng. 100, 101, 102)		6
B. Speech (Select one) 100 Speech Techniques 131 Voice and Articulation 302 Business & Professional Speech	(3) (3) (3)	3
C. Mathematics (110 or above)		3
D. Physical Education: HPER 101 Intro to P.E. HPER 160 Personal Health	(2) (2)	4
Total for Area 1.		16 hours

Area 2. Humanities and Fine Arts

	Credit Hours Required
Literature (at any level for which the student is qualified)	3
<input checked="" type="checkbox"/> Select two courses (not in same area of study.)	
Art	(3)
Theatre	(3)
*Foreign Language	(6-10)
Literature	(3)
Music	(3)
Philosophy	(3)

*May be counted as one course only if the student has more than one course in the same Foreign Language.

Total for Area 2. 9 hours

The Bachelor of Arts degree students, who must take foreign language as a degree requirement, may apply three hours of foreign language taken beyond the degree requirement toward the humanities and fine arts general education requirements.

Area 3. Natural Sciences

	Credit Hours Required
Biology	4
Physical Science	5
Total for Area 3.	9 hours

ACADEMIC REGULATIONS

		Credit Hours Required
Area 4. Behavioral and Social Sciences		3
History 110 or 120 (U.S. History)		3
PSc 120 Gov't: National, State, Local		3
Select one:		3
Psychology	(3)	
Sociology	(3)	
Economics	(3)	
History	(3)	
Political Science	(3)	
Geography	(3)	
Total for Area 4.		9 hours

		Credit Hours Required
Area 5. Elective		3
A lower or upper division course, outside the student's major area, for which he is qualified.		

Total General Education Requirements	46 hours
---	-----------------

16. Associate of Arts Degree.

- A. **Credit Hours**—A minimum sixty-two semester hours must be completed.
- B. **Residence**—The last fifteen semester hours must be completed in residence at Missouri Southern State College.
- C. **Grade Point Average**—Minimum cumulative and major field grade point average must be 2.0.
- D. **Major Field**—The student must meet the course requirements of

the particular pre-professional program he selects. Or, the degree may consist of the general education courses plus additional hours adding up to 62, as approved by the adviser and the Vice President for Academic Affairs.

- E. **General Education Requirements**—The degree requires completion of the general education requirements which are:

		Credit Hours Required
Area 1. Basic Skills		6
*English 101-102, English Composition		3
Select one:		
Speech 100, Speech Techniques	(3)	
Speech 131, Voice and Articulation	(3)	
Math 110, Introduction to College Math or higher math course	(3)	
Total for Area 1		3 12 hours

*Students who qualify for Eng. 111 meet the composition requirements with this course.

ACADEMIC REGULATIONS

		Credit Hours Required
Area 2. Behavioral & Social Sciences		3
History 110 or 120, History of United States		
Select two		6
Political Science 120, Government: National, State, Local	(3)	
History	(3)	
History	(3)	
Geography	(3)	
Geography	(3)	
Psychology	(3)	
Sociology	(3)	
Economics	(3)	
Total for Area 2	9 hours	
Area 3. Humanities and Fine Arts		Credit Hours Required
Any 3 hours of literature courses for which the student is qualified.		3
Select one:		3
Music 110, Music Appreciation	(3)	
Art 110, Introduction to Art	(3)	
Theatre 110, Theatre Appreciation	(3)	
Philosophy 201, Introduction to Philosophy	(3)	
Total for Area 3	6 hours	
Area 4. Natural Sciences		Credit Hours Required
Any biological or physical science		4
Total for Area 4	4 hours	
Area 5. Health and Physical Education		Credit Hours Required
Select one:		2
HPER 101-102, Introduction to Physical Activity	(2)	
HPER 160, Personal Health	(2)	
Total for Area 5	2 hours	
Total general education credit required—33.		

- 17. Associate of Science Degree.**
- A. **Credit Hours**—A minimum of sixty-two semester hours must be completed.
 - B. **Residence**—The last fifteen semester hours must be completed in residence at Missouri Southern State College.
 - C. **Grade Point Average**—The minimum cumulative and major field grade point average must be 2.0.

- D. **Major Field**—The student must meet the course requirements in the particular program of study he selects as approved by his adviser.
- E. **General Education Requirements**—The degree requires completion of the general education courses as well as those outlined in his major field of study. The general education required courses are:

ACADEMIC REGULATIONS

		Credit Hours Required
Area 1. Basic Skills		
1 English 101, English Composition		3
Select one:		3
2. Math 30, Programmed Course in Intermediate Algebra or higher	(3)	
Math 110, Intro. to College Math	(3)	
3. Speech	(3)	
	Total for Area 1	9 hours
1. Students who qualify may take Eng. 111 to meet this requirement.		
2. Higher level mathematics courses also satisfy this requirement.		
Area 2. Social Sciences		Credit Hours Required
Select one:		3
History 110 or 120, History of the U.S.	(3)	
Political Science 120, Government: National, State, Local	(3)	
Select one:		3
Sociology	(3)	
Psychology	(3)	
	Total for Area 2	6 hours
Area 3. Humanities and Fine Arts		Credit Hours Required
Select one:		3
Theatre 110, Theatre Appreciation	(3)	
Philosophy 201, Introduction to Philosophy	(3)	
Music 110, Music Appreciation	(3)	
Art 110, Introduction to Art	(3)	
	Total for Area 3	3 hours
Area 4. Natural Sciences		Credit Hours Required
Select one:		4
Biology 100, General Biology	(4)	
Physics	(5)	
Chemistry	(5)	
Geology	(5)	
	Total for Area 4	4 hours
Area 5. Health and Physical Education		Credit Hours Required
Select one:		2
1. HPER 101-102, Introduction to Physical Activity	(2)	
HPER 160, Personal Health	(2)	
	Total for Area 5	2 hours
1. Physically restricted students may take HPER 100.		

Total general education credits required—24.

ACADEMIC REGULATIONS

18. Physical Education Requirements.

All students are required to satisfactorily complete 4 hours of physical education before they are permitted to graduate.

Students should take these courses during the freshman and sophomore years. Students who meet the following conditions may be exempt from all or part of this requirement.

A. Students who transfer from colleges where physical education is not taught will be exempt from the requirement as follows: (1) Students transferring less than 15 semester hours will not be exempt from any of the requirements; (2) Students transferring 15 to 29 semester hours will be exempt from 2 hours of physical education; (3) Students transferring 30 hours or more will be exempt.

B. Upon presentation of proper documentation to the Registrar, a veteran may petition for exemption from physical education.

19. State Legislation Requirement.

Sections 10373, 10374, 10374a, 10374b, 10374c (S.C.S. for S.B.4) of the Laws of Missouri, 1947 (6th General Assembly), prescribe that all candidates for a degree issued by the colleges and universities of Missouri must have completed courses of instruction in and "satisfactorily passed an examination on the provisions and principles of the Constitution of the United States and of the State of Missouri, and in American History, including the study of American institutions."

Students may comply with the law (1) by completing courses embracing the subject matter specified by the law and receiving credit therein, preferably before admission to senior college work, or (2) by certification of the completion of such requirements in another collegiate institution.

All students who have completed the general education requirements in

Area 2 meet the requirements of Missouri law. Out of state students who do not take Area 2 at Missouri Southern State College must pass a special examination on the new Missouri Constitution.

School Laws of Missouri 1974, requires that persons cannot be granted a certificate or license to teach in the public schools of Missouri unless he or she has satisfactorily completed a course of two or more semester hours in the psychology or education of the exceptional child. This requirement can be met by taking the course, Psy. 302.

20. All Work Must Be Completed.

Degrees are conferred only at scheduled commencement exercises. If a student completes requirements for a degree after a commencement date, his degree will be granted at the next scheduled commencement. He may receive a certified statement of completion of graduation requirements at the Office of the Registrar. No student will be permitted to participate in the commencement exercise unless his name appears on the commencement program.

21. Presence at Commencement Exercises.

A student ready for graduation must be present at commencement in order to receive his degree. A candidate may graduate **in absentia** with the permission of the Vice President for Academic Affairs.

22. Degree Candidacy Application.

Each student must make application for degree candidacy when pre-registering for his final semester in the school year in which he is to receive his degree. The application form is available in the Office of the Registrar.

23. Payment of Graduation Fees.

The graduation fee is due not later than the beginning of the semester in which the graduation takes place.

ACADEMIC REGULATIONS

OTHER GENERAL REGULATIONS

24. Classification of Students.

Freshman: 0-29 Hours
Sophomore: 30-59 Hours
Junior: 60-89 Hours
Senior: 90 and above.

Special: Non-degree students, usually 21 years of age or over, admitted on the basis of maturity and ability, but who fail to meet regular-standing requirements or who plan to study for personal improvement only. These may qualify for regular standing by removing entrance deficiencies and by earning a minimum of C (2.0) average. Normally, there is a 32-hour limit. Credits earned as a special student may apply toward a degree when regular standing is attained and if the credit earned is regularly applicable toward a degree. Students who have attempted a degree program and who have failed to maintain normal progress toward graduation, may at the discretion of the proper college authorities, be directed into non-degree, occupational preparation programs as special students.

Post Graduate: Persons having completed a baccalaureate degree but taking courses for purpose of teacher certification, job preparation, an additional degree, or personal profit.

Transient: Students in good standing at other colleges and universities wishing to enroll at Missouri Southern State College for the purpose of transferring back to their institutions the credit earned. Admission requires completion of the application form, payment of the \$5.00 application fee, and a statement of good standing from the Vice President for Academic Affairs or Registrar of the student's home college or university.

Full-Time: A student enrolled for 12 or more semester hours.

Part-Time: A student enrolled in 11 or less semester hours.

25. Dual Credit.

A student who desires to earn credit concurrently at another institution or through correspondence, extension,

advanced standing examinations, or USAFI examinations while enrolled in residence at Missouri Southern State College must secure advanced approval from the Vice President for Academic Affairs. Exception: Armed Forces Personnel will be granted sixty days from the date of their first enrollment to establish, through USAFI examinations, advanced standing in subject matter which they mastered while in the Armed Forces.

26. Second Baccalaureate Degree.

A student may receive a second Baccalaureate degree when he has completed the first degree and all the requirements of the second degree.

(Exception: Students may not count the professional education courses of the first degree as electives toward the second degree). The "Residency" requirement **does** apply.

27. Transcript Below "C" Average.

Students who are accepted with a below "C" transcript and who are below the minimum standards for progress, paragraph 41, will be placed on Academic Probation. Missouri Southern State College accepts all grades from any equally accredited institution including both "D's" and "F's."

28. Grade Reports.

Grade reports are normally available within one week after the semester closes.

29. Mid-Semester Grades.

All students earning a "D" or an "F" in any course will receive a report following the eighth week of each semester.

30. Maximum Credit Hour Load.

All hours enrolled in above 18 shall be regarded as excessive and shall require a written petition signed by the student's division dean. Exception: Students in Music may carry 20 hours without petitioning for excessive hours.

ACADEMIC REGULATIONS

31. Late Registration.

No student will be permitted to enroll in a regular semester after the second week of classes and in a summer session after one week of classes. Any student enrolling after classes begin will pay a late enrollment fee.

32. Withdrawing from School.

A student who wishes to withdraw will initiate his withdrawal in the Office of Student Personnel (Hearnes Hall 130). A student who withdraws prior to the end of the twelfth week of a regular semester and the end of the sixth week of a summer session will receive a "W" on his permanent record. If the student withdraws after these deadlines, his courses will be listed on his permanent record with a grade of "F." Students who leave school without officially withdrawing shall receive grades of "F" in all courses.

33. Dropping Courses.

A student may initiate the dropping of a course in the Registrar's Office. Deadlines and grades cited in paragraph 32 apply.

34. Adding Courses.

A student may initiate the adding of a course in the Registrar's Office. A student will be permitted to add a course only upon the approval of his advisor. A fee of \$2.00 will be charged each time a student changes his program not at the request of the college. No course may be added after the second week of classes in a regular semester and after the first week of classes in the summer session.

35. Class Attendance.

The primary objective of student and professor is the student's attainment of course goals. It is recognized that normally those students who achieve well are regular in class attendance. The professor, when giving a final semester grade, bases his evaluation on how well the student has achieved the course goals.

The student who misses a class does so at his own risk. He must assume the responsibility for work missed because of class absences. Professors are willing to assist students whose absences are

caused by valid illnesses, college approved activities, and extenuating circumstances. The professor may require whatever evidence he needs to support the reason for absence. If a student is absent two class meetings more than the credit hours of the course, the student may be dropped from the course. However, if that student is maintaining a grade of "C" or better, he cannot be dropped from the course without his permission.

Because the attendance record is significant to the total record and useful in guidance and counseling, the professor keeps a record of individual class attendance. When he believes the absences are excessive he will report the fact to the Student Services and they will in turn counsel with the student. The total number of student absences in a class will be reported to the Registrar's office along with the final grade at the end of the semester.

The student should be aware that absenting himself from the class invariably has a built-in penalty of lower academic achievement. Excessive absences usually result in failure to achieve the course goals.

36. Grading System.

Grade	Grade Points
A—Superior	4
B—Above Average	3
C—Average	2
D—Minimum Passing	1
F—Failing	0
W—Withdrawal	0
I—Incomplete	0
Au—Audit (registration without credit)	
Cr—Credit (course passed with no specific grade)	

An incomplete must be made up by the end of the next semester or it will automatically be converted into an F. The student is to arrange with his professor the work essential to change the incomplete into a regular grade. Both credit and grade points are suspended until the incomplete (I) is converted to either a passing grade or an F.

A grade point average (GPA) at the end of any semester is the total number of

ACADEMIC REGULATIONS

grade points earned divided by the total number of hours attempted.

37. Official Transcripts.

An official transcript of the student's academic record bears the registrar's signature and the college seal. Missouri Southern State College assumes no responsibility for the accuracy of a transcript after it leaves the registrar's office.

Up to two weeks must be allowed after the close of a semester for the issuance of an up-to-date transcript. The transcript request must be made in writing. Each student is entitled to two (2) free transcripts. Additional copies cost \$1.00 each. No transcript will be issued unless all bills to Missouri Southern State College are paid or are current according to agreement with the business office.

38. Auditors.

With the consent of the dean of the division and the instructor concerned, a student may be admitted to a course as an auditor.

Auditors must be registered and pay fees as a regular or special student. They receive no college credit.

Courses taken for credit cannot be changed to an audit during the semester. Neither can a course taken for audit be changed to credit during the semester.

39. Good Standing and Eligibility.

Students enrolled at Missouri Southern State College are in good academic standing when they meet the normal progress toward graduation as described below. Those falling below the prescribed norm will be placed on academic probation. Persons failing to achieve normal progress toward graduation during the probationary period are subject to academic suspension.

Exception: Students receiving financial aid from the College or the United States Government must earn some college credit during the last semester in which he was enrolled in order to maintain good standing.

Those students competing in inter-collegiate athletics or in organizations representing the college off campus are ineligible to participate in these programs when they fall below the norms set for minimum standards of progress.

40. Academic Bankruptcy.

A student may petition the Academic Policies Committee that one semester of his academic work be disregarded in computing his academic record. To be eligible for petitioning, a student must be currently enrolled, in good standing, and he must document the unusual conditions which justify his petition. The petition may be initiated in the Registrar's Office.

Academic Bankruptcy can never be used as a means of obtaining academic honors or athletic eligibility. Academic Bankruptcy will not remove grades from the student's permanent record. It merely allows one semester of recorded work to be eliminated in computing the student's scholastic average.

41. Standards of Progress Toward Graduation.

A student's cumulative grade point average (GPA) is used to evaluate his progress. If the grade point average falls below the minimum standards of progress, his work is considered unsatisfactory.

Progress toward a degree is computed on the following grade point averages:

For Associate Degree Candidates

Hours Attempted	Grade Point Avg.
1-17 semester hours	1.5
18-33 semester hours	1.6
34-43 semester hours	1.75
44-55 semester hours	1.9
56 and above	2.0

For Baccalaureate Degree Candidates

1-17 semester hours	1.5
18-33 semester hours	1.6
34-46 semester hours	1.75
47-62 semester hours	1.8
63-77 semester hours	1.85
78-93 semester hours	1.9
94-107 semester hours	1.95
108 and above	2.0

ACADEMIC REGULATIONS

42. Academic Probation, Suspension, and Reinstatement.

Each student should consider a grade point average of less than 2.0 as a warning.

Those falling below the standards of progress toward graduation will be placed on academic probation. If the grade point average is not raised to the minimum standard of progress during the probationary semester, the student is subject to immediate academic suspension from the college.

A student receiving academic suspension must stay out of Missouri Southern State College one semester.

Students completing their semester of suspension must re-apply for admission through the Office of Admissions.

Re-entry may be denied by the Vice President for Academic Affairs if the student cannot present evidence that indicates a high probability of academic success.

43. Repetition of Courses.

A course in which a student has made a grade of D or F may be repeated. The grade and grade points in the repeated class will be cancelled and the second grade will be used in computing grade point averages.

44. Honor Roll.

Dean's Honor Roll—To be placed on the Dean's Honor Roll, the student must be an undergraduate in regular standing and earn a minimum of 3.5 out of a possible 4.0 points on twelve or more semester hours during the fall and/or spring semesters.

45. Graduation Honors.

In recognition of superior scholarship, the college awards honors to associate degree and baccalaureate degree graduates as follows:

Associate Degree. The student must have completed a minimum one half of the hours required for the degree in residence at Missouri Southern State College. The cumulative grade point average required to receive First

Honors is 3.75; Second Honors, 3.65; and Third Honors, 3.50.

Baccalaureate Degree. Cum Laude is awarded those students who have a cumulative grade point average of 3.3.

Magna Cum Laude is awarded those students who have a cumulative grade point average of 3.7.

Summa Cum Laude is awarded those students who have a cumulative grade point average of 3.85.

Eligibility for any one of the three honors also requires the candidate to study all his junior and senior years at Missouri Southern State College and earn a minimum of 60 semester hours of credit.

46. Course Numbers and Levels.

Course Numbers:

0-99	Not applicable toward baccalaureate degree.
100-199	Primarily for freshman
200-299	Primarily for sophomores.
300-399	Primarily for juniors.
400-499	Primarily for seniors.

Normally courses numbered 100-299 are considered junior or lower division level courses, and those numbering 300-499 are senior or upper division level courses. There are more significant distinctions between the sophomore and junior years than within the levels of the lower and upper divisions.

The student should check the catalog description of the course to see whether the second semester of a sequence course makes the first semester prerequisite.

Freshman are not permitted to take any course above the two hundred level unless qualified by advanced placement tests. The exception is infrequent.

All courses offered by this college are listed beginning on page 69 of this catalog. Immediately following each course title is a letter abbreviation of the semester in which this course is to be offered. Students and faculty should use this as a guide in considering future enrollment. **HOWEVER, THIS SHOULD NOT BE INTERPRETED AS A CONTRACT.** MISSOURI SOUTHERN STATE

ACADEMIC REGULATIONS

COLLEGE RESERVES THE RIGHT TO DEVIATE FROM THIS COMMITMENT WHEN ENROLLMENT, OR OTHER FACTORS DICTATE.

47. Course Numbering System.

Missouri Southern State College has adopted a course numbering consistent with a national system and designed for computer processing. In this system there are listed large areas of knowledge and training, and within each area there are subdivisions. Missouri Southern is using a seven-digit number, such as 0502-101. The number 05 identifies the large area of Business Management. The number 02 identifies a subdivision of accounting. The first four numbers, then, are the new standardized national system of numbering, and the last three numbers are Missouri Southern's system of numbering her individual courses within each department.

Below are two lists: First, the list of the large divisions available at Missouri Southern. Second, the list of the departments with their symbols and numbers.

Large Academic Divisions of Knowledge and Training (Baccalaureate Degree Level)

- 04 Biological Sciences ~
- 05 Business and Management
- 06 Communications
- 08 Education
- 10 Fine and Applied Arts
- 11 Foreign Languages
- 12 Health Professions
- 15 Letters
- 17 Mathematics
- 19 Physical Sciences
- 20 Psychology
- 22 Social Sciences

Technological and Occupational Curriculums (Associate Degree Level)

- 50 Business and Commerce Technologies.
- 51 Data Processing Technologies
- 52 Health Services and Paramedical Technologies
- 53 Mechanical and Engineering Technologies
- 54 Natural Science Technologies
- 55 Public Service Related Technologies

DEPARTMENTS, THEIR SYMBOLS, AND THEIR NUMBERS AT MSSC

Accounting (Acct.) 0502	Environmental Health Technology (EHT) (4-Yr.) 1299
Art (Art) 1002, 03	(2-Yr.) 5408
Automotive Technology (Auto) 5306	History (Hist.) 2205
Aviation (AV) 5302	Industrial Arts (IA) 0839
Biology (Bio) 0401 to 0499	Journalism (Jour.) 0602
Business, General (GB) 0501, 03, 06, 99	Law Enforcement (LE) 5505
Chemistry (Chem.) 1905, 06, 07, 08, 99	Machine Technology (MT) 5315
Computer Science (Comp.) 5101, 02, 03, 04	Marketing and Management (MM) 0509
Dental Assistant Technology (DAT) 5202	Mathematics (Math) 1701, 02, 03, 99
Dental Hygiene Technology (DHT) 5203	Military Science (MS) 1801
Drafting and Design (DD) 5303, 04	Music (Mus.) 1004, 06
Economics (Econ.) 0517	Nursing (Nur.) 5208
Education (Educ.) 0802, 03, 10, 11, 16, 17, 21, 27, 29, 30, 33, 34, 99	Office Administration (OA) 0514
English (Eng.) 1501, 02, 03, 99	Philosophy (Phil.) 1509
Foreign Language:	Physical Education, Health, Recreation (HPER) 0835, 36, 37
French (Fren.) 1102	Physics (Phys.) 1901, 02
German (Ger.) 1103	Political Science (PSc) 2207
Spanish (Span.) 1105	Psychology (Psy.) 2001, 02, 05, 06, 09, 10, 11, 22, 99
Geography (Geog.) 2206	Radiologic Technology (RT) 5207
Geology (Geol.) 1914	
Health Facilities Administration (HA) 5218	

DEPARTMENTS, SYMBOLS & NUMBERS

Sociology (Soc.) 2208
Speech (Spch.) 1506
Theatre (Th.) 1007

48. The Revised Standards for Veterans' Educational Benefits as adopted by the State Board of Education on February 17, 1977, are available in the Vet-

erans Affairs Office. Each veteran should see the veteran counselor or veterans representative regarding these policies.

49. Any exceptions to the regulations above must receive written approval from the Vice President for Academic Affairs.



THE CURRICULUM

DIVISIONAL ORGANIZATION AND OBJECTIVES

The college is organized into four divisions, each with a dean as its executive. The divisions are subdivided into departments. The divisions and departments are under the administrative supervision of the Vice President for Academic Affairs.

The divisional objectives and programs are as follows:

I. Division of Business Administration (Departments of accounting, economics and finance, general business, marketing and management, and office administration):

(1) Preparing individuals to enter the business community and perform effectively and responsibly in the diversified areas of industry, commerce and government; (2) Preparing individuals for positions of responsibility and leadership; (3) Preparing individuals to teach business subjects on the secondary level; (4) Provide a background sufficient to successfully pursue advanced degrees in the diversified areas of business.

It is the primary purpose of the Division of Business Administration to continuously develop and improve the caliber of instruction, programs, and courses which will achieve these objectives and, thereby, fulfill the educational needs and goals of the individuals previously mentioned.

The Division of Business Administration offers three bachelorette degree programs, an associate degree, and a certificate of achievement:

1. Bachelor of Science in Business Administration with majors in:
 - (a) Accounting
 - (b) Economics & Finance
 - (c) General Business
 - (d) Marketing & Management
2. Bachelor of Science with a major in Management-Technology.
3. Bachelor of Science In Education with a major in Business Education (two plans).
4. Associate of Science degree with majors in:
 - (a) Accounting
 - (b) General Business
 - (c) Secretarial Science
5. Certificate of Achievement: Secretarial Typist

II. Division of Education and Psychology (Departments of elementary education, secondary education, health, physical education and recreation, and psychology):

The programs of this division are designed to reflect the following general aims:

THE CURRICULUM

(1) To prepare persons who demonstrate by their behavior the professional, social, emotional, and intellectual maturity necessary to perform effectively as elementary and secondary school teachers; (2) To prepare persons who display a meaningful philosophy of living and a dedication to service; (3) To prepare persons who indicate in their daily lives a concern for and knowledge of good physical and mental health; (4) To teach creative and beneficial leisure-time activities that will serve the student throughout life; (5) To prepare persons with a degree of understanding in the area of psychology which is necessary to perform well as a graduate student or to be of service to society in a service vocation.

The division provides specific course work leading to the degrees of Bachelor of Science in Education, Bachelor of Arts with a major in Psychology, Bachelor of Science with a major in Psychology, and a Bachelor of Science in Education with a major in Special Education-Psychology.

More specifically the Department of Education is responsible for teaching and coordinating of the professional education sequence in the Bachelor of Science in Education degree. It also administers the major programs in elementary education and special education. The department of Health, Physical Education and Recreation serves the basic requirements for all college students, provides a major in professional physical education, and provides minors in driver education instruction and athletic coaching. The Department also supervises the women's and men's intramural sports programs.

III. Division of Arts and Sciences:

Objectives of Departments of fine arts, language and literature

These departments comprise those areas of learning in which the student is made aware of some of mankind's greatest thought and noblest art. Through the study of art, journalism, language, literature, music, philosophy, speech, and theatre, the student enlarges his capacity to express himself and at the same time develops his ability to comprehend and appreciate the creative efforts of others.

These departments are concerned with creative self expression, although distinct in that each is a specific discipline or area of study.

A. Viewed in relation to the total college curriculum, the functions of the departments are twofold:

1. General Education—Certain courses offered in every area of Humanities and Fine Arts are especially designed to make available to each student skills and understanding which greatly add to his personal development, regardless of his specialization. (a) Through

DIVISIONAL OBJECTIVES

courses in English and speech he will increase his ability to read, write, and speak his own language and deepen his understanding of its literature. (b) By studying foreign languages, he will learn to communicate with people of other nations and to appreciate the intellectual contributions of cultures other than his own. (c) Through participation in theatre, he will develop poise and power of oral expression. (d) In a guided study of the masterpieces of music and art, he will learn to enjoy and appreciate world treasures. (e) In philosophy, he will become familiar with the problems of knowledge, the natural world, and society, and with the quest for the good life.

2. Major or area of concentration—To achieve a high level of competency in his special interests, a student elects an area of concentration. (a) Programs in art, English, foreign languages, speech, theatre, and music form major areas for candidates for the Bachelor of Science in Education degree. (b) A lesser concentration in several of these areas is required for a Bachelor of Science in Education degree with a major in elementary education. (c) Students not planning to teach but desiring competency in an area may elect to receive a Bachelor of Arts degree for personal enrichment or as preparation for graduate study.

B. In addition to curricular functions, the departments exert a strong influence upon the cultural life of the college and community.

1. The musical and dramatic performing organizations offer opportunities for participation to all qualified students, thus serving as a valuable outlet for aesthetic self-expression.

2. The regular publication of the college newspaper, *The Chart*, not only provides practical experience for students interested in journalism, but also serves the college community and alumni with reports of college activities.

3. The creative arts publication written and edited by MSSC students, under the sponsorship of the Language and Literature and Fine Arts Departments, serves the dual purpose of providing an outlet for artistic and literary expression and practical experience in the editorial functions associated with publishing. Through this medium, young writers and artists may not only gain experience in the development of their talents, but also enrich the cultural resources of the college community. This is an opportunity that they and their editors have for speaking to and for the other students, and, at the same time, for interesting, entertaining, and influencing all at MSSC.

4. Displays of art works by students and faculty in the Art Gallery and in the exhibits sponsored by Spiva Art Center, housed in the Gallery, stimulate the artistic community.

5. The services of members of the faculty of all departments to community organizations—professional, cultural and civic—aid in acquainting the public with the programs of the college.

THE CURRICULUM

Objectives of departments of biology, chemistry, geology, mathematics, and physics

To support the purposes and objectives of the college by coordinating the various departments of science and mathematics in order to aid the student to: (a) become more knowledgeable about the biological and physical aspects of the earth and universe; (b) understand and use the scientific method; (c) gain a comprehensive understanding of subjects for teaching (if teaching is the goal); have a broad base of learning and understanding, regardless of the major field of study selected, through general education courses. The division also meets needs of students preparing for engineering, dentistry, medical technology, medicine and nursing.

Objectives of departments of geography, history, political science, and sociology

The purposes are to provide the student with the skill, attitudes, and understanding necessary to give life direction and meaning; to encourage the student to think and to evaluate the broad issues of life; and to stimulate his acquiring new interests that he may pursue for the sheer pleasure of learning.

The division has a special concern in the preparation of social science teachers for the schools of Missouri and the undergraduate education of students who are planning careers in government and community service.

The objectives of the division are:

1. To prepare students for certification as social science teachers in the elementary and secondary schools.
2. To provide the undergraduate education needed for students desiring to continue graduate work in history, political sciences or sociology.
3. To provide a program of extracurricular activities that aid in introducing the student to his future role of service to community and nation.

IV. Division of Technology (Departments of Automotive Technology, Aviation, Computer Science, Criminal Justice, Dental Assisting, Dental Hygiene, Drafting & Design, Environmental Health Technology, Health Administration, Industrial Arts, Law Enforcement, Machine Technology, Medical Technology, Military Science, Nursing, and Radiologic Technology).

(1) To provide an opportunity for post-high school education for students seeking skills preparing them for employment. (2) To give both specialized instruction and general education in sufficient balance to prepare for living as well as working in society. Students enrolling in the specialized courses of this division should know that some of them may not be applicable toward a baccalaureate degree if he should later decide to seek it.

COURSES OF INSTRUCTION

ACCOUNTING

Division of Business Administration

England, Finke, Goode, Grim, Jones, Paapanen

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with the Accounting major and an Associate of Science degree with the Accounting major. In the same place find the requirements for the Bachelor of Science in Education degree with a Business Education major.

0502-101—Elementary Accounting (F,S) 3 hrs. cr.

Fundamental principles of accounting as applied to modern business practice. Analysis of balance sheets and income statements. Prerequisite or corequisite GB 101.

0502-102—Elementary Accounting (F,S) 3 hrs. cr.

Continues Accounting 101 with emphasis on corporation accounts. Prerequisite Acct. 101.

0502-212—Intermediate Accounting I (F,S) 3 hrs. cr.

A continuation of corporation accounting including a detailed study of the fundamental process with emphasis on current assets, current liabilities, and noncurrent investments. Prerequisite: Acct. 102.

0502-301—Intermediate Accounting II (S) 3 hrs. cr.

A continuation of corporation accounting, emphasizing stockholders equity, long-term liabilities, various financial statement analysis. Prerequisite: Acct. 212.

0502-302—Advanced Accounting (S) 3 hrs. cr.

Application of accounting principles to partnerships, installment and consignment sales, receiver's accounts, estates and trusts, and consolidating statements. Prerequisite: Acct. 301.

0502-310—Cost Accounting (F,S) 3 hrs. cr.

Study of accounting control with management emphasis as applied to industrial enterprise. Special emphasis on product costs and cost systems. Prerequisite: Acct. 102.

0502-401—Tax Accounting (F,S) 3 hrs. cr.

Procedures for reporting federal income taxes with emphasis on income and deductions for individuals. Practice is given in preparing federal income tax returns. Prerequisite: Acct. 102 or permission. (See General Business 401.)

0502-411—Auditing (F) 3 hrs. cr.

The procedures involved in preparing an audit of the various accounts of a business enterprise. Prerequisite: Acct. 301.

0502-412—C.P.A. Problems (F) 3 hrs. cr.

A course designed to guide the student in preparing for the Uniform Certified Public Accountant Examination. Topics covered include study methodology, lecture and problem-solving exercises on Examination subjects, and a review of appropriate theoretical and technical pronouncements. Prerequisite: 21 hours of accounting including Acct 411, Auditing, or senior standing and permission of the instructor. Note: The course is offered in the Fall semester in a format allowing completion prior to the C.P.A. examination date in November.

COURSES OF INSTRUCTION

0502-491—Internship in Public Accounting (F)

3 hrs. cr.

Selected senior accounting students serve an internship of approximately six weeks as junior accountants on the staff of practicing certified public accountants and/or private industry. The program is supervised by the faculty. An oral and written report is required. Prerequisites: Acct. 301, 401, 411 and/or consent of the internship committee.

0502-498—Seminar in Accounting (demand)

1-3 hrs. cr.

A seminar for upper division accounting or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission. Examples of seminars offered in the past are:

- 498-Seminar in Advanced Tax
- 498-Seminar in Managerial Accounting
- 498-Seminar in Advanced Auditing
- 498-Seminar in Advanced Cost

0502-499—Independent Study in Accounting (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of accounting for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

ART

**Division of Arts and Sciences
Department of Fine Arts**

Cole, Dishman, Fowler, Hess, Jones

A major for the Bachelor of Arts degree includes 32 required credit hours plus 18 hours of art electives approved by student's advisor. Required art courses are: Art 100, Art 120, Art 130, Art 132, Art 211, Art 230, Art 232, Art 301-302, Art 312, and Art 490.

A major for the Bachelor of Science in Education degree with one teaching field consists of 32 credit hours plus 15 hours of art electives approved by the student's advisor. Required art courses are: Art 100, Art 120, Art 130, Art 211, Art 220, Art 132, or 230, Art 232, Art 301-302, Art 312 and Art 490. A student wishing to certify to teach art as one of two teaching fields must complete 36 hours. See page 96 for teacher education requirements.

1002-100—Art Composition (F,S)

3 hrs. cr.

Introductory course using fundamental techniques and media, including art practice and theory.

1003-110—Introduction to Art (F,S)

3 hrs. cr.

A general survey course designed to increase appreciation of visual art.

1002-120—Ceramics (F,S)

3 hrs. cr.

Methods and techniques of hand building are studied with application to modeling and throwing clay forms. Prerequisite: Art 100 or 110.

1002-130—Drawing Techniques (F)

3 hrs. cr.

Free-hand drawing problems using various drawing tools and techniques used by master artists. Prerequisite: Art 100.

1002-132—Introduction to Design (S)

3 hrs. cr.

Foundation course using problems involving art principles and elements.

ART

- 1002-200—Arts and Crafts (S,Odd)** **3 hrs. cr.**
General crafts course involving leather tooling, block printing, pottery, weaving and some graphics. May be taken by non-art majors.
- 1002-205—Beginning Jewelry and Silversmithing (F)** **3 hrs. cr.**
A general introduction to jewelry casting, soldering, and finishing metals. Prerequisites: Art 100 and Art 132.
- 1002-211—Sculpture Techniques (F)** **3 hrs. cr.**
Study of various sculptural problems and techniques in stone, clay, wood, and mixed media. Prerequisite: Art 100, 121.
- 0831-220—Art Education (F,S)** **3 hrs. cr.**
Course designed to develop understanding of the problems in teaching art with emphasis on methods of teaching various art problems. Required for all Elementary Education Majors.
- 1002-230—Basic Form (F)** **3 hrs. cr.**
Study of relationships of parts to form. Problems include two and three dimensional. Prerequisite: Art 100.
- 1002-232—Painting Techniques (S)** **3 hrs. cr.**
Procedures, techniques, and fundamentals of painting, media—oil, watercolor, and mixed. Prerequisite: Art 100 and 130.
- 1002-300—Drawing (S)** **3 hrs. cr.**
Self exploration of various drawing elements including artistic anatomy, composition, structure, and aesthetics. Prerequisite: Art 100, 130, or approval of the instructor.
- 1003-301—Art History (F)** **3 hrs. cr.**
Survey of the development of man's artistic endeavors from Stone Age to the Early Renaissance.
- 1003-302—Art History (S)** **3 hrs. cr.**
Continuation of 301 from the Early Renaissance in Italy to the present art styles.
- 1002-310—Watercolor (S)** **3 hrs. cr.**
Technical and aesthetic understanding of watercolor with various subject matters encouraged. Prerequisite: Art 130.
- 1002-312—Beginning Printmaking (F)** **3 hrs. cr.**
Initial laboratory exercises in various Intaglio processes; etching, engraving, drypoint, mezzotint, and other mixed media. Prerequisite: 1002-130.
- 1002-321—Sculpture (S,Odd)** **3 hrs. cr.**
Various media (plastic, metal, clay, mixed) are chosen by the student for investigation.
- 1002-322—Sculpture (demand)** **3 hrs. cr.**
Continuation of 321. Prerequisite: Art 211 and 312.
- 1002-330—Advanced Jewelry and Silversmithing (S)** **3 hrs. cr.**
Advanced methods and techniques of complex forms will be explored for Jewelry Design. Prerequisite: Art 205.

COURSES OF INSTRUCTION

1002-401—Painting (F,Even)	3 hrs. cr.
The student selects an individual problem for investigation. Techniques, history, and painting methods of acrylic or oil paintings are surveyed for understanding. Prerequisite: Art 232.	
1002-407—Advanced Ceramics (S)	3 hrs. cr.
Advanced methods, techniques, and procedures of pottery making and design in clay. Prerequisite: Art 120.	
1002-412—Commercial Art (F, Even)	3 hrs. cr.
Lettering, layout, and design techniques. Survey of various reproductive processes. Prerequisite: Art 120, 230, and 232.	
1002-420—Special Projects in Art I (F,S)	3 hrs. cr.
An advanced studio course elected by the student in a particular area of Art. Students attend a regular scheduled course but complete an independent special project as approved by the instructor. Requirements: (1) An exhibit of the special projects completed, (2) Oral summation to the regular course students, (3) Formal paper documenting the special projects. PREREQUISITE—Completion of advanced courses and approval of instructor.	
1001-421—Head Study (demand)	3 hrs. cr.
Fundamental methods in portraiture. Various drawings and painting media for structure of the head. Atistic head anatomy used for each head study. Prerequisite: Art 130, and 232 or 300.	
1002-430—Advanced Printmaking (S)	3 hrs. cr.
Advanced Intaglio techniques. Studio methods of color registration, burning, engraving, drypoint, mezzo-tint, etching, and other related printing processes are offered. Prerequisite: Art 312.	
1002-440—Special Projects in Art II (F,S)	3 hrs. cr.
Same as Art 420. PREREQUISITE—Special Projects in Art I.	
1002-498—Seminar in Art (demand)	3 hrs. cr.
Student art problems investigated with group participation. Class meets twice weekly with Department Head to discuss student findings. Requirements: research papers and oral presentations of investigated problems. Prerequisite: 20 credit hours in art.	
1002-490—Senior Studio (F,S)	2 hrs. cr.
Special study in any art media or technique chosen by the student. Requirements: (1) Art survey paper, (2) Senior art exhibit, (3) Oral presentation. Prerequisite: Senior standing.	

ASTRONOMY

Division of Arts and Sciences

(See Physics)

1911-300—Astronomy (demand)	3 hrs. cr.
Solar system, gravitation, Kepler's laws, celestial coordinate systems, telescopes and optical systems, stellar evolution, nebula, galactic structure, and cosmology. Two hours lecture and one two-hour lab a week. Prerequisites: Physics 100 or equivalent and one year of high school algebra.	

AUTOMOTIVE TECHNOLOGY

Division of Technology

Adams, Morris

The major emphasis in Automotive Technology is specialization in automotive service and business management. The training also provides the background for entry into a general automotive repair or specialized field where a technical knowledge of machines, tools and testing equipment is required.

The curriculum is college oriented. Students are regular members of the campus body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science degree in Automotive Technology requires the completion of the General Education courses (see page 56) plus the following: Auto. 100, 110, 120, 130 or Accounting 101, Auto. 190, 200, 220, 250, 260, and Drafting & Design 110.

5306-100—Automotive Engines (F)

7 hrs. cr.

A beginning course in the theoretical and practical application of internal combustion engines. This course covers engine operation, cycles, design and service of component and accessory systems. The laboratory provides the student with the opportunity to develop skills in the diagnosis and service of engines and their supportive systems. Three one-hour lectures; twelve hours laboratory per week.

5306-110—Technical Mathematics (S)

3 hrs. cr.

Review of basic mathematics, algebra, and the functional concepts of trigonometry. Includes use of tables and graphic methods of solving problems with emphasis on application to problems in applied fields. Daily. Prerequisite: Math 20-30.

5306-120—Automotive Electrical and Emission Control (S)

7 hrs. cr.

Course of study of electricity, the ignition system fuels and lubricants, carburetion and emission control systems found on the internal combustion engine. Emphasis is placed on the operation, diagnosis and service of each of these systems. The laboratory period provides the student an opportunity to apply the theoretical knowledge to practical problems. Three one-hour lectures; twelve hours laboratory per week.

5306-130—Automotive Business Management (F)

3 hrs. cr.

A basic accounting cycle with emphasis on recording transactions affecting cash, sales, purchases, and the preparation of financial statements. Three one-hour lectures.

5306-150—Automotive Theory and Mechanics (demand)

3 hrs. cr.

A course designed to acquaint the student with theoretical and practical knowledge of the basic functions, care and maintenance of the various automotive systems and common accessories. Laboratory periods provide students the opportunity to learn common diagnostic techniques and to make nontechnical corrections of the more commonly occurring automotive malfunctions. Basic safety inspections will be emphasized. Suggested as an essential course for all students obtaining certification as instructors of driver education and as an elective course for any student who wishes to increase his or her knowledge about the automobile. Two one-hour lectures; one two-hour laboratory per week.

5306-190—Technical Science (F)

4 hrs. cr.

A study of the forces, laws of motion, mechanical power, fluid mechanics, and other physics principles as related to present day prime movers. Course work places emphasis on applied or practical application. Three one-hour lectures; one two-hour laboratory per week. Prerequisites: Auto. 110 or Math 100 with a minimum grade of C.

COURSES OF INSTRUCTION

5306-200—Automotive Chassis, Brakes and Transmission (F) 7 hrs. cr.

A study of the design, operating principles and service procedures of the chassis suspension system, brakes and drive line of the modern motor vehicle. The laboratory emphasizes the diagnosis and service of these components. Three one-hour lectures; 12 hours laboratory per week.

5306-220—Automotive Air Conditioning and Accessories (F) 4 hrs. cr.

A course to familiarize the student with automotive air conditioning units and power accessories. The emphasis is placed on service and diagnosis of these units on and off the vehicle. Three one-hour lectures, one three hour lab per week. Prerequisite: 5306-120 Automotive Electrical and Emission Control.

5306-250—Automotive Body and Paint (S) 7 hrs. cr.

A study of the methods of auto body construction, repair, refinishing processes and materials. The laboratory provides the students with the opportunity to repair various types of body damage and experiment in the use of the various types of repair and refinish materials. Three one-hour lectures; 12 hours laboratory per week.

5306-260—Auto Service Management (S) 7 hrs. cr.

The principles of shop design, personnel and production management, and industrial safety. The laboratory provides the student with the opportunity to gain additional experience in the area he chooses to specialize. Three one-hour lectures; 12 hours laboratory. Prerequisite: Auto 100, 120, 200 and 220 with minimum grades of C.

5306-498—Seminar in Automotive Technology (demand) 1-3 hrs. cr.

Covers specialized knowledge and skills related to new developments in automotive design and service. Topics will vary by the semester and situation. Prerequisite: Senior standing in management-technology and the Associate Degree in Automotive Technology.

5306-499—Independent Study in Automotive Technology (demand) 1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of automotive technology for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission of instructor.

BIOLOGY

Division of Arts and Sciences

Bingman, Elick, Ferron, Gibson, Jackson, Orr, Prentice, Stebbins, Tillman

The biology department provides an opportunity for students to specialize in the areas of classical, allied health, or environmental aspects of biology.

The Bachelor of Science Degree with a major in Biology requires 40 hours in Biology. Required courses include: Bio 101, Bio 112, Bio 122, Bio 210, Bio 211 or 231, Bio 305, and Bio 490.

Upper division students may follow interests but must take at least one course from each of the following areas:

Group A-Bio 316, Bio 322, Bio 414

Group B-Bio 331, Bio 442, Bio 462

Group C-Bio 312, Bio 402

Note: Some graduate schools require at least one systematics course. Additional requirements include 13 hours of chemistry through organic, Math 140 and five hours of elementary physics. Chem 302 is strongly recommended.

BIOLOGY

Students planning on going into professional schools such as dentistry, medicine, veterinary science, etc. should consult the pre-professional advisor with the biology department about specific requirements for these areas of study. Bio. 499 is strongly recommended for qualified students.

The Bachelor of Science in Education degree with biology as a single teaching field (Plan B) requires 35 hours in biology plus 18 hours in supporting subjects of chemistry and mathematics. Required courses include Bio. 101, and Bio. 112, Bio. 122, Bio. 211 or 231 and Bio. 305 in addition to a total of 19 upper division hours in biology. Math 140 and 13 hours of chemistry through organic are also required. Elementary physics and Geol. 110 are strongly recommended.

The Bachelor of Science in Education degree with biology as one of two teaching fields (Plan A) must complete 23 semester hours in biology, 13 of which must be upper division, plus 15 hours in supporting subjects of science and mathematics. Required courses are Bio. 101, Bio. 122, Chem. 101, Math 140 and either elementary physics or Geol. 110. Both of the latter are strongly recommended.

See page 96 for teacher education requirements.

0401-101—General Biology (F,S)

4 hrs. cr.

A one semester general treatment of the unifying principles of living things including metabolism, genetics, evolution and ecology. Emphasis will be upon these biological principles as they relate to humans. Three lectures and one 2 hour lab per week. (Formerly Bio. 100.)

0402-112—Botanical Survey (F,S)

3 hrs. cr.

The morphology, physiology and classification of plants are studied with an emphasis upon morphology and classification. Two lectures and one 2 hour lab per week. Prerequisite: Bio. 101.

0407-121—General Zoology (F,S)

4 hrs. cr.

This course is an introductory study of the basic principles of cytology, metabolism and genetics. A brief survey of those invertebrates that directly relate to man will be made. The emphasis will be placed upon the anatomy and physiology of man in preparation for Bio. 221. Three lectures and one 2 hour lab per week. (Formerly Bio. 120.)

0407-122—Zoological Survey (F,S)

3 hrs. cr.

The morphology, physiology and classification of animals are studied with an emphasis upon morphology and classification. Two lectures and one 2 hour lab per week. Prerequisite: Bio. 101.

0417-210—General Physiology (F,S)

4 hrs. cr.

A detailed study of biological function at the cell and molecular level. Physiological characteristics of both plant and animal cells will be studied. Three lectures and one, two-hour lab per week. Prerequisite: Bio 101, Bio 112, Bio 122, Chm 102.

0411-211—Microbiology (S)

5 hrs. cr.

Principles of general microbiology with special emphasis on the anatomy, nutrition, physiology and chemistry of bacteria, fungi, and other microscopic organisms. Three lectures and two 2 hour labs per week. Prerequisites: Bio. 101 and one year of inorganic chemistry, or permission of the instructor.

0412-221—Human Anatomy and Physiology (F,S)

5 hrs. cr.

The structures and functions of the human body with emphasis on arrangement of organs and coordination of body systems. Three lectures and two 2 hour labs per week. Prerequisite: Bio. 121 or Bio. 101 and 122.

COURSES OF INSTRUCTION

0411-231—Fundamentals of Medical Microbiology (F) 5 hrs. cr.

For students interested in paramedical professions. Topics of study include the general principles of microbiology, immunology, host-parasite relationships of pathological organisms. Three lectures and two 2 hour labs per week. Prerequisite: 1 course each of a college chemistry and a biological science. Credit toward the biology major may include either Bio. 211 or Bio. 231 but not both.

0401-250—Contemporary Issues in Biology (S) 2 hrs. cr.

New developments in reproductive physiology, the potential for direction of our future evolution through genetic manipulation are just two of the issues which may have great impact on mankind. This course helps students to gather data and formulate their own opinions on these and other issues in biology. Two discussions per week. Prerequisite: Bio 101, Bio 112, Bio 122.

0422-305—Genetics (F,S) 4 hrs. cr.

A comprehensive introduction to the principles of heredity and variations as exemplified by both higher plants and animals. Emphasis will be placed on the cytological and molecular approach to gene action, linkage, crossingover and various other genetic mechanisms. Labs will primarily be designed to allow students the opportunity to experimentally work with genetical principles and develop scientific methodology. Three lectures and one 2 hour lab per week. Prerequisite: Bio. 101. (Formerly Bio. 202.)

0412-306—Human Physiology and Anatomy (F,S) 5 hrs. cr.

The structures and functions of the human body with emphasis on arrangement of organs and coordination of body systems. Three lectures and two 2 hour labs per week. Prerequisite: Bio. 121 or (Bio. 101 and 122), for students working on a four year degree. Lectures and labs will coincide with Bio. 221. (Credit will not be given for Bio. 221 and Bio. 306).

0420-310—Field Biology (F,S) 2 hrs. cr.

The course engenders appreciation and understanding of the local flora and fauna, and provides information pertinent to preparation and preservation of specimens for laboratory use. Consists of one lecture and one 2 hour laboratory each week. At least one Saturday field trip will be required. Prerequisite: Bio. 101 or permission of instructor. (Does not count toward any biology major.)

0420-312—Environmental Biology (F) 4 hrs. cr.

A study of environmental factors and their interactions with living things. Emphasis is placed on human ecology and wise natural resource utilization. Three lectures per week and one, two-hour lab per week. Prerequisite: Physics 100, Biology 101, Math 110, or permission of the instructor

0420-314—Environmental Biology Laboratory (F) 2 hrs. cr.

Practical experiences in measuring environmental factors and conducting ecological investigations. Four hours of laboratory per week. Co-requisite or Prerequisite: Biology 312 or permission of the instructor.

0402-316—Economic Botany (F) 3 hrs. cr.

A comprehensive study of the economic uses of plants. The present and possible future value of lower plants is covered. Emphasis is placed upon the economic aspects of higher plants from an agricultural, horticultural, and crop selection viewpoint as well as from a pharmacological, textile usage, etc. view. Three lectures a week. Prerequisite: Bio. 101 or equivalent. (Formerly Bio. 201.)

0417-318—Cell Biology (S,Odd) 4 hrs. cr.

A study of cell structure and function in detail. Emphasis will be placed upon cytological physiology. Three lectures and one 2 hour lab per week. Prerequisite: Bio. 112, 122, 305, and Chem. 301 or consent of the instructor.

BIOLOGY

0402-322—Taxonomy of Flowering Plants (S) 4 hrs. cr.

The relationships among selected plant groups, classification and descriptions of taxa, nomenclature and concepts concerning the evolutionary sequence of various plant characters. Southwestern Missouri flora will be emphasized. Two lectures and two, 2 hour lab/week. Prerequisites: Bio. 101 and 112.

0408-331—Comparative Chordate Anatomy (F) 5 hrs. cr.

Designed for the serious student of biology or those students planning to enter professional schools of medicine, dentistry or veterinary science. Acquaints the student with the evolutionary trends of chordate structure and development with special emphasis on the vertebrate organs and organ systems. Two lectures and two 3 hour lab/week. Prerequisite: Bio. 101 and 122.

0421-332—Introduction to Entomology (F,Even) 3 hrs. cr.

A study of the insects with respect to collecting methods, taxonomy, life history, morphology and evolution. Prerequisites: Bio. 101 and 122. Two lectures and one 3-hour lab/week.

0411-342—Microtechnique (Offered only on demand) 2 hrs. cr.

A study of the principles of preserving, fixing, staining, and mounting of biological materials. Prerequisites: Bio. 101 and 121. Two 2 hour labs/week.

0408-343—Vertebrate Natural History (S) 4 hrs. cr.

Identification, distribution, behavior and life histories of vertebrate animals with emphasis on field studies. Three lectures and one 2 hour lab per week. Prerequisite: Bio. 122. (Formerly Bio. 341.)

0408-352—Biomes (S) 2 hrs. cr.

A study of the interactions between plants and animals in a variety of different habitats. Since an extended field trip comprises a significant portion of the study for this course, travel expenses must be paid by the student during registration. Prerequisite: Bio. 101, Bio. 112, Bio. 122, and permission of the instructor.

0411-361—Parasitology (F,Even) 4 hrs. cr.

A systematic investigation of the numerous parasites which may be found within vertebrates. Life cycles of parasites which infect man will be emphasized. Three lectures and one, three-hour lab per week. Prerequisite: Bio. 101, Bio. 122.

0411-362—Virology (F,Odd) 3 hrs. cr.

A study of the origin and evolution of viruses and the diseases that they cause. Molecular aspects of each phase of the virus life cycle within cells will be emphasized. Three lectures per week. Prerequisite: Bio. 211 or Bio. 231, Bio 305.

0408-370—Environmental Health (S) 4 hrs. cr.

A course concerned with contemporary environmental health problems and public protection measures. These will include public health disease prevention, vector control, etc. Three lectures and one, two-hour lab per week. Prerequisite: Bio. 211 or 231, Junior standing in science or permission of instructor.

0402-402—General Ecology (S) 4 hrs. cr.

A study of plant and animal communities in relation to their environment, emphasizing the flora and fauna of Southwest Missouri. Soils, climate and other major environmental factors responsible for the distribution and association of plants and animals are also considered. Three lectures and one 3 hour lab/week. Prerequisite: Bio. 101, 112, and 322, or consent of the instructor.

COURSES OF INSTRUCTION

0406-414—Plant Anatomy (F,Odd) 4 hrs. cr.

A comparative study of the tissues and cellular structure in the higher plants as illustrated in roots, stems, and leaves with special emphasis upon the evolution and development of the structures. Three lectures and one 2 hour lab per week. Prerequisite: Bio. 112. (Formerly Bio. 413.)

0410-431—Animal Physiology (F,Even) 5 hrs. cr.

A comparative and ecological approach to the physiology of animals with emphasis placed on laboratory studies with local species. Three lectures and two, two-hour labs per week. Prerequisite: 10 hours of biology. Bio. 210, Bio. 331 and Chem 300 recommended.

0413-433—Histology (S,Even) 4 hrs. cr.

A detailed study of microscopic structure of animal tissues and organs with special emphasis on mammalian tissue. Three lectures and one 3 hour lab per week. Prerequisite: 10 hours of zoology or consent of the instructor.

0410-442—Invertebrate Zoology (F,Odd) 5 hrs. cr.

Classification, morphology, physiology, development and evolution of the classes of invertebrate animals. Three lectures and two 2 hour lab/week. Prerequisite: Bio. 122.

0408-456—Immunology (S,Even) 3 hrs. cr.

To provide a course for those interested in the health sciences and who wish to know more about the immune mechanism and its role in prevention of disease, hypersensitivity, and transplantation immunity. Three lectures per week. Prerequisites: Bio. 211 or 231 and Bio. 305.

0410-462—Embryology (S,Odd) 5 hrs. cr.

Includes detailed comparisons of developmental process of members of the classes of vertebrates. Three lectures and two 2 hour lab/week. Prerequisite: Bio. 122 and/or Bio. 331.

0498-490—Seminar (F,S) 1 hr. cr.

A faculty supervised discussion group concerned with reviews and reports covering current topics in the various fields of biology. Faculty members, as well as students, will present reviews in their various areas of interest. One meeting/week. Prerequisites: Primarily for biology majors of junior standing or other interested students with at least 15 hours of biological science.

0499-498—Seminar in Biology (F,S) 1-3 hrs. cr.

A seminar for upper division majors only. The class will meet regularly a minimum number of hours. The course is designed to give specialized instruction in some discipline of biology not covered in other courses Prerequisite: Junior standing, 20 hours in biology and a minimum GPA of 2.5 in biology, or permission of the instructor required.

0499-499—Problems in Biology (F,S) 1-3 hrs. cr.

Consists of individual work under the supervision of a staff member, with the credit and hours to be arranged. Problems may be undertaken in any field of biology, with adequate preparation and the consent of the supervising instructor, Department Head and Division Dean. Prerequisite: A minimum GPA of 3.0 in 20 hours of biology.

GENERAL BUSINESS

Division of Business Administration

Compton, England, Grim, Leitle, Marion, Miller, Price, Tiede, Turner

BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

A student may obtain a Bachelor of Science in Business Administration in any of four majors and must complete the following requirements:

A.	General Education (see page 53)	46 hours
B.	Business Administration (Required Core)	42
C.	Business Major Requirements (Accounting, Economics and Finance, General Business, Marketing Management)	12-18
D.	Electives	24-18
	Total	124 hours

B. Business Administration Core Requirements:

GB 101	Introduction to Business	3 hours
Acct 101	Elementary Accounting I	3
Acct 102	Elementary Accounting II	3
Econ 201	Principles of Economics (Macro)	3
Econ 202	Principles of Economics (Micro)	3
GB 301	Business Law I	3
GB 320	Business Communications	3
GB 321	Business Statistics I	3
GB 337	Managerial Data Processing	3
MM 300	Principles of Marketing	3
MM 350	Principles of Management	3
Econ 350	Financial Management	3
MM 452	Business Policy	3
Required Elective. Choose one from:		3
GB 302*	Business Law II	
Econ 300**	Money and Banking	
GB 332	Business Statistics II	
MM 441	Organizational Behavior	
Acct 498	Seminar in Managerial Accounting	
Total Core Requirements		42 hours

*Accounting majors planning to sit for the CPA examination should take GB 302, Business Law II as a required elective.

**Students majoring in Economics and Finance may not choose Money and Banking as a required elective.

C. Major Requirement

In addition to the core requirements listed above, the requirements by major are:

Accounting Major

Acct 212	Intermediate Accounting I	3
Acct 301	Intermediate Accounting II	3
Acct 310	Cost Accounting	3
Acct 302	Advanced Accounting	3
Acct 401	Tax Accounting	3
Acct 411	Auditing	3
		18 hours

COURSES OF INSTRUCTION

General Business Major

Requires an additional 12 hours of Business and Economics courses, with at least 3 hours selected from each of the following areas:

Economics and Finance	3
Marketing and Management	3
General Business	3
Electives in Business	3
	<u>12 hours</u>

Marketing and Management Major

1) Four of the following 5 hours are required

MM 312	Retailing
MM 352	Personnel Management
MM 401	Promotional Strategy
MM 412	Marketing Management
MM 431	Production Management

2) Electives in Business and Economics

6 hours
18 hours

Economics and Finance Major

1) Required:

Econ 300	Money and Banking
Econ 401	Microeconomic Analysis
Econ 402	Macroeconomic Analysis
Econ 411	Investments

2) Plus 6 hours from the following:

Econ 302	Economic Growth and Development
Econ 412	Urban and Regional Economics
Econ 498	Seminar in Economics and Finance
GB 322	Business Statistics II
Hist 315	Economic History of the United States
Geo 222	Economic Geography

18 hours

BACHELOR OF SCIENCE DEGREE IN MANAGEMENT-TECHNOLOGY

The Bachelor of Science degree with a major in Management-Technology is a transfer degree program and requires a minimum of an Associate Degree (or equivalent) in an acceptable technological field for admission to the program.

In addition to the General Education requirements for all bachelor degrees (see page 53) the B.S.M.T. degree requires the following courses:

1. Required core courses for the B.S.M.T.

Actc 101	Elementary Accounting I	3
Actc 102	Elementary Accounting II	3
GB 301	Business Law I	3
GB 302	Business Law II	3
GB 320	Business Communications	3
Econ 201	Principles of Economics (Macro)	3
Econ 202	Principles of Economics (Micro)	3
Econ 350	Financial Management	3
MM 300	Principles of Marketing	3
MM 350	Principles of Management	3
MM 352	Personnel Management	3
		<u>33 hours</u>

GENERAL BUSINESS

2. Nine additional hours to be selected from:	9
Acct 310 Cost Accounting	
GB 321 Business Statistics I	
GB 337 Managerial Data Processing	
MM 401 Promotional Strategy	
MM 412 Marketing Management	
MM 431 Production Management	
MM 452 Business Policy	
	<hr/> 42 hours

BACHELOR OF SCIENCE IN EDUCATION DEGREE

Business Education as a Single Teaching Field (Plan B)

In addition to General Education requirements (see page 53) and the Professional Education requirements of the Division of Education (see page 96) the Bachelor of Science in Education degree with Business Education as a single teaching field consists of 42 semester hours:

GB 121 Office Machines I	3
Acct 101 Elementary Accounting I	3
Acct 102 Elementary Accounting II	3
OA 102* Intermediate Typewriting	3
OA 200* Advanced Typewriting	3
OA 111* Elementary Shorthand	3
OA 120* Intermediate Shorthand	3
Accounting. Choose one:	
Acct 212 Intermediate Accounting I	3
Acct 310 Cost Accounting	
Acct 401 Tax Accounting	
Acct 498 Seminar in Managerial Accounting	
Econ 201 Principles of Economics (Macro)	3
Econ 202 Principles of Economics (Micro)	3
GB 301 Business Law I	3
GB 302 Business Law II	3
Marketing-Management. Select one:	
MM 300 Principles of Marketing	3
MM 350 Principles of Management	
Upper Division elective in business	<hr/> 3
	42 hours

*Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses in order to meet the 42 hour requirement.

The Bachelor of Science in Education degree with Business Education as one of two teaching fields (Plan A) consists of 30 semester hours:

Acct 101 Elementary Accounting I	3
Acct 102 Elementary Accounting II	3
Accounting. Select one:	
Acct 212 Intermediate Accounting I	3
Acct 310 Cost Accounting	
Acct 401 Tax Accounting	
Acct 498 Seminar in Managerial Accounting	
Econ 201 Principles of Economics (Macro)	3
Econ 202 Principles of Economics (Micro)	3

COURSES OF INSTRUCTION

OA 102*	Intermediate Typewriting	3
OA 200*	Advanced Typewriting	3
OA 111*	Elementary Shorthand	3
OA 120*	Intermediate Shorthand	3
Upper Division Elective in Business		<hr/> 3
		30 hours

*Students having proficiency in typewriting and shorthand may ask to be tested. If advanced standing is granted in the subjects, the student will substitute other courses to meet the 30 hours requirement.

ASSOCIATE OF SCIENCE DEGREE

The Division of Business Administration offers two-year programs leading to the Associate of Science degree in Accounting, General Business, and Secretarial Science.

1. Associate of Science in Accounting

The curriculum prepares students to enter public accounting firms, industry, banking, and government service as accounting assistants, Junior accountants or accounting clerks. The degree requires completion of:

a. General Education (see page 56)	24	hours
b. GB 101 Introduction to Business	3	
GB 121 Office Machines I	3	
Acct 101 Elementary Accounting I	3	
Acct 102 Elementary Accounting II	3	
Acct 212 Intermediate Accounting I	3	
Econ 201 Principles of Economics (Macro)	3	
Econ 202 Principles of Economics (Micro)	3	
OA 102 Intermediate Typewriting	3	
or		
OA 200 Advanced Typewriting	3	
Acct 310 Cost Accounting	3	
MM 350 Principles of Management	3	
GB 301 Business Law I	3	
Acct 401 Tax Accounting	3	
c. Electives. Should be selected from Business Law II Auditing, Business Statistics I, or Seminar in Managerial Accounting	2	

2. Associate of Science in General Business

This program provides the student with the necessary background, knowledge, and skills that are needed to enter the business world at the first-level supervisory position or as owner-operators of a private business. The degree requires the completion of:

a. General Education (see page 56)	24	hours
b. GB 101 Introduction to Business	3	
Acct 101 Elementary Accounting I	3	
Acct 102 Elementary Accounting II	3	
Econ 201 Principles of Economics (Macro)	3	
Econ 202 Principles of Economics (Micro)	3	
GB 301 Business Law I	3	
GB 302 Business Law II	3	
MM 300 Principles of Marketing	3	
MM 350 Principles of Management	3	
Electives:	11	

GENERAL BUSINESS

Selected electives from the business areas of personnel management, promotional strategy, retailing, salesmanship, and business communications. Selections from psychology are also valid.

3. Associate of Science in Secretarial Science

The secretarial science program prepares the student for the position of professional secretary. The degree requires completion of:

a. General Education (see page 56)	24	hours
b. GB 101 Introduction to Business	3	
Acct 101 Elementary Accounting	3	
GB 301 Business Law I	3	
OA 200 Advanced Typewriting	3	
OA 220 Dictation and Transcription	3	
OA 230 Secretarial Procedures	3	
Electives:	20	

Electives may include prerequisite courses to OA 200 and OA 220 if needed. Others should be selected from Office Machines, Business Communications, Principles of Management, Accounting, Economics, General Psychology, Business Math.

CERTIFICATE OF ACHIEVEMENT

Secretarial Typist

A one-year secretarial certificate program that provides students with training essential to obtaining employment as a secretarial-typist. Successful completion of the required curriculum entitles the student to a Certificate Achievement.

The certificate requires the completion of:

GB 101	Introduction to Business	3
GB 110	Business Mathematics	3
GB 121	Office Machines I	3
Acct 101	Elementary Accounting I	3
Eng 101	Composition	3
GB 320	Business Communications	3
OA 200	Advanced Typewriting	3
OA 210	Advanced Shorthand	3
SP 100	Speech	3

0501-101—Introduction to Business (F,S)

3 hrs. cr.

An introductory course in modern American business, including a study of the capitalistic system, ownership and organization, management problems, marketing, finance, law and taxation.

0501-110—Business Mathematics (F,S)

3 hrs. cr.

A review of the fundamental processes of mathematics as applied to business. It also includes common and decimal fractions, percentages, markup, interest, bank discount, compound interest, annuities, insurance, payrolls, taxes, and financial statements. It should be taken concurrently with or precede accounting and/or office machines.

5005-121—Office Machines I (F,S)

3 hrs. cr.

A laboratory course in the operation of the office machines found in the modern business office. Training is given in the operation of the ten-key and full-key adding machines, the electronic calculator, the rotary calculator, the printing calculator, the key-driven calculator, the bookkeeping machine, the transcriber, and the spirit and stencil duplicators. Emphasis is placed upon the student developing accuracy and

COURSES OF INSTRUCTION

speed in working typical business problems. Meets five days a week. Prerequisite: 1 semester of high school or college typewriting.

5005-122—Office Machines II (F,S)

3 hrs. cr.

An advance laboratory course, continuing the work as set up in office machines 121. Special emphasis is placed on machine bookkeeping and the electronic, rotary and printing calculators. The student is also expected to attain additional skill in the operation of adding machines. A special unit of the course includes operation of programmatic electronic equipment. Meets three days a week. Prerequisite: GB 121.

0501-320—Business Communications (F,S)

3 hrs. cr.

The study of principles for writing effective business letters, memos, formal and informal reports and all phases of effective business communications. Prerequisites: Eng. 101 and 102 or permission.

0506-301—Business Law I (F,S)

3 hrs. cr.

A study of the principles of law and its enforcement as applied to American business. The course includes a study of court systems and procedures, contracts, personal property, commercial paper and sales. Special emphasis is placed on Missouri case-law and statutes. Lectures are supplemented by actual cases and case digests.

0506-302—Business Law II (F,S)

3 hrs. cr.

Study of secured transactions, insurance, bankruptcy, agency, employment, partnerships, corporations, real property, torts, criminal law and government regulation. Special emphasis is placed on Missouri case-law and statutes. Lectures are supplemented by actual cases and case digests.

0501-310—Consumer Economics, Personal Economics, Personal Finance, and Citizenship (demand)

2 hrs. cr.

A course designed to give the student useful tools that will enable him to learn the management of personal and family finances. Areas covered: Budgeting, insurance, income taxes, consumer credit, investments, real estate, etc. Prerequisite: Junior standing. Not open to Business Majors.

0503-321—Business Statistics I (F,S)

3 hrs. cr.

Introduction to the basic concepts of statistical inference and to the methods of statistical analysis as they apply to business decision making. Prerequisite: Math 130 or equivalent.

0503-322—Business Statistics II (S)

3 hrs. cr.

Study of methods of statistical analysis relating to business decision making and research in business and economics. Covers probability theory, tests of hypotheses, sampling and experimental design, correlation, non-parametric statistical methods, and selected statistical techniques. Prerequisite: Business Statistics I.

0506-337—Managerial Data Processing (F)

3 hrs. cr.

Study of the application of automatic information processing to business, the media for recording, processing, and controlling of business information by the automatic process, and the formats and flow of data through electronic computers with simulated problems applicable to areas of Accounting, Management, and Marketing. Prerequisite: Junior standing in Business Administration and MM 350.

0502-401—Tax Accounting (See Accounting 401) (F,S)

3 hrs. cr.

0501-410—Small Business Management Practicum (F,S)

3 hrs. cr.

A practical course designed to provide students experience in solving real problems in an actual business environment. Students provide counseling to small

GENERAL BUSINESS

business firms through cases referred by the Small Business Administration. Course may be repeated to a total of six hours of credit. Prerequisite: Second semester Junior or Senior standing in Business Administration and permission of the instructor. Application for admission to the course is required.

0506-411—Labor Law (S)

3 hrs. cr.

A study of significant legislation affecting the relationships between labor and management. Special attention is given to the Labor-Management Relations Act, as amended, emphasizing the establishment of the bargaining unit and unfair labor practices on the part of both labor and management. Prerequisite: GB 301, Business Law I or consent of the instructor.

0599-498—Seminar in General Business (demand)

1-3 hrs. cr.

A seminar for upper division general business or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission. Examples of seminars offered in the past are:

498-Seminar in Office Machines

498-Seminar in Career Orientation

498-Seminar in Consumer Behavior

0599-499—Independent Study in General Business (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of general business for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

CHEMISTRY

Division of Arts and Sciences Department of Physical Science

Albright, Baiamonte, Kash, Mosher, Whittle

A major for the Bachelor of Science degree consists of 34 semester hours in chemistry plus 20 additional hours in mathematics and physics. The required courses are: Chem. 101, Chem. 102, Chem. 162, Chem. 201, Chem. 301, Chem. 302, Chem. 401, 4 elective upper division hours in chemistry, Math 150, Math 250, Phys. 250, and Phys. 260.

A major for the Bachelor of Arts degree consists of 25 semester hours in chemistry plus 13 additional hours in mathematics and physics. The required courses are: Chem. 101, Chem. 102, Chem. 162, Chem. 201, either Chem. 300 plus 4 hours of upper division chemistry electives (excluding 301) or Chem. 301 and Chem. 302, Math 140 or Math 150, Phys. 151, and Phys. 152. An A.B. degree is for students who desire some knowledge of chemistry as a basis for work in other fields, but who do not expect to become professional chemists.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 50 semester hours. The required courses are: Chem. 101, Chem. 102, Chem. 162, Chem. 201, Chem. 301, Chem. 302, Chem. 401, Math 150, Math 250, Phys. 250, and 5 elective hours in 200 level and above courses in mathematics, physics and/or Chemistry. See page 96 for teacher education requirements.

A major for the Bachelor of Science in Education degree with Chemistry as one of two teaching fields (Plan A) consists of 25 semester hours of chemistry plus 5 hours of mathematics. The required courses are: Math 140, Chem. 101, Chem. 102, Chem. 162, Chem. 201, and either Chem. 301, Chem. 302, or Chem. 300 plus 4 hours of upper division chemistry electives (excluding Chem. 301).

COURSES OF INSTRUCTION

Physical Science Major

A major for the Bachelor of Science in Education degree with a double teaching field in physics and chemistry consists of 21 hours of chemistry and 20 hours of physics, 5 hours of Geology, plus mathematics through Math 260. The required courses are: Phys. 250, Phys. 260, Phys. 301, Phys. 381, Chem. 101, Chem. 102, Chem. 162, Chem. 201, Chem. 301, Geol. 110, plus 3 hours of upper division electives in physics. See page 96 for teacher education requirements.

1905-100—Introductory Chemistry (F,S)

5 hrs. cr.

The basic principles and theories of general chemistry. Primarily designed as a terminal course in Chemistry. Three lectures, one 3-period laboratory, and one recitation session per week.

1905-101—General Chemistry I (F,S)

5 hrs. cr.

Introduction to theories of chemistry with emphasis on the relationship of structure to properties of matter and the quantitative aspect changes. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite or corequisite: Math 140 or higher level math course.

1905-102—General Chemistry II (F,S)

3 hrs. cr.

A continuation of Chem. 101. Emphasis on the dynamics and thermodynamics of chemical processes and on the properties and reactions of analogous groups of cations and anions. Three lectures and one recitation session per week. Prerequisites: Chem. 101 with a minimum grade of C or permission of instructor and Math 140 or higher level math course.

1909-162—Qualitative Analysis (S)

3 hrs. cr.

Identification of cation and anions. Application of principles presented in Chem. 102. One lecture and two 3-period laboratories per week. Prerequisite of corequisite: Chem. 102.

1909-201—Analytical Chemistry I (F)

5 hrs. cr.

The standard first course in quantitative chemical analysis. The lecture and laboratory include volumetric, gravimetric, potentiometric and spectrophotometric methods of analysis. The emphasis in this course is on the interpretation of experimental data. This course, when followed by Chemistry 421, constitutes a year's sequence in analytical chemistry. Three lectures and two 3-period laboratories per week. Prerequisite: Chem 102.

1907-300—Introduction to Modern Organic Chemistry (S)

5 hrs. cr.

The basic principles of organic chemistry—nomenclature, structure, properties, stereochemistry, reactions—will be studied by the functional group approach. Designed for students who require a general knowledge of organic chemistry in their chosen career or as a background for other courses in technical or professional training programs. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite: Chem. 102.

1907-301—Organic Chemistry I (F)

5 hrs. cr.

Deals with both aliphatic and aromatic compounds, their nomenclature, properties, reactions and stereochemistry. Three lectures, one 3-period laboratory, and one recitation section per week. Prerequisite: Chem. 102.

1907-302—Organic Chemistry II (S)

5 hrs. cr.

A continuation of Chem. 301. A mechanistic treatment of substitution, elimination, addition, and free radical reactions. Three lectures, one 3-period laboratory, and one recitation session per week. Prerequisite: Chem. 301.

CHEMISTRY

0414-351—Biochemistry (F)

3 hrs. cr.

Fundamental concepts of the chemistry of lipids, carbohydrates, and proteins with emphasis on the physiological aspects of these compounds. The interrelationship of these compounds in living systems will be presented through bioenergetics and reaction pathways. Three lectures per week. Prerequisite: Chem. 300 or Chem. 302

1908-401—Physical Chemistry I (F,Odd)

4 hrs. cr.

Gases, solids, liquids, homogeneous and heterogeneous solutions and thermodynamics. Theoretical derivations of equations and mathematical treatment of physical and chemical phenomena. Three lectures and one 3-period laboratory per week. Prerequisites: Math 250 and Phys. 260.

1908-402—Physical Chemistry II (S,Even)

4 hrs. cr.

A continuation of Chem. 401. The study of chemical kinetics, electromotive force, photochemistry, colloid chemistry, and atomic and molecular structure. Three lectures and one 3-period laboratory per week. Prerequisite: Chem. 401.

1909-421—Analytical Chemistry II (S)

5 hrs. cr.

A study of the overall analytical process. The lecture and laboratory deal mainly with electrochemical and spectrophotometric methods of analysis and their application in chemical analysis but also include other physicochemical and separatory techniques used in modern analytical processes. Three lectures and two 3-period laboratories per week. Prerequisite: Chem. 201

1906-422—Advanced Inorganic Chemistry (F,Even)

4 hrs. cr.

Modern inorganic chemistry with emphasis upon coordination complexes, periodic classification of the non-transitional and transitional elements. Three lectures and one 3-period laboratory per week. Prerequisites: Chem. 102 and Math 250.

1907-472—Organic Qualitative Analysis (S,Odd)

4 hrs. cr.

Systematic identification of organic compounds and mixtures. Two lectures and two 3-period laboratories per week. Prerequisite: Chem. 302.

1999-498—Seminar (F,S)

1-3 hrs. cr.

A seminar for upper division chemistry majors. The content of the course, depending on the students' needs, will vary from library research to special topics in chemistry. Prerequisite: senior standing or permission of the Department Head.

1999-499—Independent Study (F,S)

1-3 hrs. cr.

Independent investigation techniques; includes a paper upon a selected topic with both a critical survey of the chemical literature and results from advanced laboratory experimentation. Open to students having (1) a minimum of 15 hours of chemistry, (2) the ability to undertake independent work, and (3) permission of the instructor. Registration must be approved by the Adviser, Department Head, and Division Dean.

COMPUTER SCIENCE

Division of Technology

Calicott, Cragin, Gray

The increasing use of computers in business, science, and industry has created many opportunities for employment in banking, business, industry, and various governmental agencies. There are currently four programs offered:

1. The ASSOCIATE OF SCIENCE DEGREE IN COMPUTER PROGRAMMING is oriented toward Business/Management Programming. It requires completion of the

COURSES OF INSTRUCTION

General Education courses (see page 56), plus the following: Acct. 101, 102 and 212 or 310; Comp. 100, 110, 120, 230, 240, 250 and 300; Econ. 201 and 202; GB 321; and Math 130 or 131 or 140. This is a two-year program.

2. The ASSOCIATE OF SCIENCE DEGREE IN ELECTRONIC DATA PROCESSING COORDINATION prepares the graduate for employment in a typical data processing installation. Its orientation is toward Office Administration and general secretarial work related to Data Processing. It requires completion of the General Education courses (see page 56), plus the following: Actc. 101 and 102; Comp. 100, 110, 120 and 230; GB 101 and 321; Math 130; OA 200; and four courses elected from among the following: GB 121, 122, 320, 301, 302 and 337; Comp. 300; MM 300, 350 and 352; OA 111, 210 and 230. This is a two-year program.

3. The ASSOCIATE OF SCIENCE DEGREE IN COMPUTING ANALYSIS is oriented toward Science/Engineering Programming. The programmer confers with engineers, scientists or management in the development of efficient solutions to problems. It requires completion of the General Education courses (see page 56), plus the following: Comp. 120, 220, 230, 240 and 250; Math 150, 250, 260, 322, 361 and 431 or 350; Phys. 250 and 260. This is a two-year program.

4. The DATA PROCESSING CERTIFICATE Program provides the student with the essential training for employment in a typical data processing installation. It requires the completion of Act. 101; Eng. 101; GB 101; Math 130 or 140 or 131; Comp. 100, 120 and 230; GB 320; Speech 100. This is a one-year program.

5101-100—Introduction to Data Processing (F.S)

3 hrs. cr.

Illustrates need for machines in accounting and record keeping, and demonstrates the concept, power and flexibility of the unit record. Includes unit record machine functions, elements of machines: card punch, verifier, interpreter, sorter, reproducing punch, collator, tabulators, and calculators. Introduction to number systems. Basic problem analysis and logical block diagramming. Familiarization with higher-level programming languages. Three 1 hour lectures per week.

5102-110—Key-Punch/Data Entry Operations (F.S)

3 hrs. cr.

Preliminary emphasis on basic mastery of the keyboard and the mechanism of data entry devices. Latter portion of the course places emphasis on speed and accuracy of operation. Three one hour lectures per week.

5103-120—Introduction to Programming (F,S)

3 hrs. cr.

An introduction to digital computers which includes: Basic principles, systems theory, decimal systems, arithmetic operations, self-complementing codes and other coding systems, computer logic, systems components, general block diagram and program functions, high speed memory, programming essentials, and solution of simple data processing problems. Two 1 hour lectures; 2 hours of laboratory per week Prerequisites: Comp. 100 and Math 130 or 131, or consent of instructor.

5104-220—Analog Methods and Simulation Techniques (S)

3 hrs. cr.

Methods and techniques of solving systems of simultaneous differential equations on electronic analog computers, and digital computers. Includes the principles of multiplication and division and simulation of non-linear devices and systems, block diagramming of systems, familiarization with La Place methods, transfer functions. Certain design problem applications will be treated. Corequisite: Math 322.

5103-230—Advanced Programming (F,S)

3 hrs. cr.

5103-120 Advanced Programming (3) 3 hrs. cl.
Functions and capabilities of digital computers. Special techniques and methods essential to becoming a programmer. Includes applications, systems, special subroutines. Two one hour lectures and three one hour laboratories per week. Prerequisite: 5103-120 (Intro. to Programming).

COMPUTER SCIENCE

5104-240—Computer Applications (F) 3 hrs. cr.

A continuation of programming technique development. Principles presented in previous courses will be employed in this course. Emphasis will be placed on non-routine types of applications, including quality control, statistics, curve-fitting, forecasting, etc. Latter portion of course involves individual projects with oral and written reporting. Two one hour lectures and three one hour laboratories per week. Prerequisite: 5103-120 (Intro. to Programming).

5103-250—Principles of Digital Computing Machines (F) 3 hrs. cr.

Provides the necessary foundation for study of computing machines. Includes the concepts of notation, binary system, octal system, systems conversions, representation of a number with an arbitrary base, fixed and floating point numbers, precisions, switching circuits. Boolean Machines and other discrete mathematical topics. Three one-hour lectures per week; laboratories by arrangement. Prerequisite: 5103-120 (Intro. to Programming).

5104-300—Systems Analysis and Design (S) 3 hrs. cr.

Business systems analysis design and development. Designed to guide the student through the evolution of a system, analysis of present information flow, system specifications and equipment selections, and implementation of the system, includes the approach, requirements of a system, development of the solution, data controls, system controls, system evaluation, finalizing the system and system evaluation. Familiarization with special Mgmt. Science functions (e.g. Work Measurement, Work Sampling, Forms Design and Control, Mgmt. Research). Three one hour lectures plus laboratories by arrangement. Prerequisite: 5103-230 (Advanced Programming).

5104-498—Seminar in Computer Science (demand) 1-3 hrs. cr.

A seminar for students vocationally oriented toward automated data processing. The course content will depend on the needs of the attendees. Prerequisites: 60 hours college credit with a grade point average of 3.0 or permission of the department head.

5104-499—Independent Study (demand) 1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head. Prerequisite: 60 hours credit with a grade point average of 3.0. Registration in the course must be approved by the adviser and the department head.

CRIMINAL JUSTICE ADMINISTRATION

Mosher, Seneker, Spurlin, Terry, Whittle, Williams

Two degree options are available, the Associate of Science Degree in Law Enforcement (See page 121) and the Bachelor of Science in Criminal Justice Administration. Students seeking either degree must first schedule a conference with the program director.

The B.S. in Criminal Justice Administration is designed for persons planning careers in law enforcement, juvenile justice, corrections, probation and parole, federal investigative agencies, related positions, and when combined with the ROTC program, for Military Police officers. Many of these positions have requirements relating to physical condition and integrity of personal background with which the student should become familiar.

The Bachelor of Science degree in Criminal Justice Administration requires the completion of the required General Education courses and the following: 22 hours of required CJAd courses, LE 100, LE 250, LE 150, LE 210, LE 290, CJAd 490. Plus an additional 11 hours of CJAd electives and the following supporting courses: 3 hrs. upper div. Political Science; Soc. 351, Soc. 391 and 6 hrs. other sociology courses in

COURSES OF INSTRUCTION

addition to Intro. to Sociology; Psych 432 and 6 additional upper div. hours of psychology; 21 hours of elective courses chosen with adviser approval for a total of 124 semester hours. Students taking LE 190 are not eligible for CJAd 490. This curriculum constitutes a 15 hour supportive area in Sociology.

5505-210—Basic Photography (F) 3 hrs. cr.

Lecture and laboratory procedures for use of cameras, lenses, developing negatives and prints and enlarging. Prerequisite: Psys. 100 or consent.

5505-300—Criminal Investigation II (S) 3 hrs. cr.

Major case investigative methods, sources of information, development of leads, methods applicable to organized crime and specific offenses. Prerequisite: LE 200.

5505-310—Traffic Accident Investigation & Controls (S) 3 hrs. cr.

Theory and techniques for investigating and reducing occurrence of motor vehicle accidents, collection and evaluation of physical evidence and reporting. Prerequisite: 3 hrs. college level mathematics.

5505-320—Probation and Parole (S) 2 hrs. cr.

Study of presentence investigation methods, predicting parole behavior, supervisory practices, legal aspects. Prerequisite: LE 100, Soc. 110.

5505-410—Juvenile Procedures (F) 3 hrs. cr.

Juvenile and family court procedures and substantive law as it applies to the youthful offender. Procedures for juvenile officers such as collection of evidence, taking into custody, and development of the case. Prerequisite: LE 210 or consent.

5505-450—Criminal Evidence (S) 3 hrs. cr.

Study of the rules of evidence, admissibility, presumptions, inferences, burden of proof, exceptions to the hearsay rule. Prerequisite: LE 210, LE 250.

5505-490—Internship in Criminal Justice (Arr.) 6 hrs. cr.

Extensive practical experience with an area Criminal Justice agency, subject to individual committee approval. Not open to those who have taken LE 190. Prerequisite: Junior standing CJAd majors and consent.

5505-498—Seminar in Criminal Justice (demand) hrs. cr.

A survey of current advances in the field. Precise topics to be announced, for upper division majors in CJAd or those who have completed the A.S. degree in law enforcement. Prerequisite: consent of instructor.

5505-499—Independent Study in Criminal Justice (Arr.) 1-3 hrs. cr.

Individually directed study for advanced majors in areas of criminal justice selected with adviser approval. Proposal must be approved by program director and division. dean. 3.5 grade average in major area or consent required.

DENTAL ASSISTING

Gremling, Karst, Noirfalise

Missouri Southern State College offers a planned two semester curriculum in the field of Dental Assisting. Graduates of this program are eligible to take the examinations required for certification as a Certified Dental Assistant.

The Dental Assisting curriculum is a limited enrollment curriculum, therefore admission to the College does not automatically convey admission to this program,

DENTAL ASSISTING

however eligibility for admission to the College must be established before consideration for admission to Dental Assisting can be given. Applications for admission to Dental Assisting should be submitted to the Dental Assisting office before May 1. Detailed information regarding admission requirements to the Dental Assisting curriculum may be obtained from the Director of Dental Programs.

Dental Assisting courses must be taken in the prescribed order. A deficient grade (D or F) in a dental assisting course may prevent the student from enrolling in the next prescribed course.

Completion of this program requires the completion of all Dental Assisting (5202) courses plus other courses indicated in the suggested order of study.

5202-100—Dental Science I (F)

3 hrs. cr.

An introduction to human anatomy and physiology with emphasis on the head and neck region. Includes dental anatomy with a detailed study of cusps, grooves, roots, ridges, and their relationship to occlusion. Reproduction of tooth forms by scaled drawings. Three lectures per week.

5202-120—Dental Laboratory Procedures I (F)

3 hrs. cr.

This course is a study and practicum in pouring of plaster and stone casts, the preparation of restorative and impression materials, plus the use of dental equipment. Two lectures; two hours laboratory per week.

5202-130—Dental Orientation (F)

2 hrs. cr.

Orientation to the dental profession including organizational structure, ethics and legislature, and philosophy of dental prevention. Clinical application of preventive methods is included. Three hours lecture per week for 10 weeks. 1 1/2 hours lecture per week for 6 weeks.

5202-140—Dental Operative Procedures (F)

5 hrs. cr.

Course deals primarily with the care and manipulation of equipment, instruments, and supplies, and the recognition of dental instruments, equipment supplies, and their relationship to dental procedures. Extramural training in dental office the last 6 weeks. Three lectures. 6 hrs. laboratory per week. Last 6 weeks: 3 lectures, 16 hours clinical, 3 hours laboratory per week.

5202-150—Dental Science II (S)

3 hrs. cr.

An introduction to microbiology, pharmacology, pathology, and diet and nutrition related to the science of dentistry. Three lectures per week.

5202-160—Dental Laboratory Procedures II (S)

3 hrs. cr.

Continuation of Dental Laboratory Procedures I emphasizing prosthetics. Two lectures; one 2 hour laboratory per week.

5202-170—Dental Secretarial Procedures (S)

3 hrs. cr.

General office management, record keeping, appointment scheduling telephone techniques, collection of accounts, and communication. Three lectures per week.

5202-180—Dental Specialties (S)

3 hrs. cr.

Practice and instruction in various procedures with emphasis on dental specialties. Lectures include instruction on first aid, and dental office emergencies. 3 hours lecture per week.

5202-190—Clinical Dental Assisting

5 hrs. cr.

Sixteen hours clinical practice per week in participating clinical facilities.

DENTAL HYGIENE

Gremling, Overman

Missouri Southern State College offers an Associate of Science in Dental Hygiene. Satisfactory completion of the requirements for this degree qualifies the graduate to take the National Board Dental Hygiene Examination as well as the clinical examinations required for licensure in Missouri and other states.

Enrollment in Dental Hygiene is limited, therefore admission to the College does not automatically convey admission to the Dental Hygiene curriculum, however admission requirements of the College must be met before an applicant will be considered for admission to Dental Hygiene. Admission to Dental Hygiene requires special testing and other special requirements. Complete details regarding the special requirements, tests, etc., may be obtained from the Dental Hygiene Department. Applications for admission to Dental Hygiene should be submitted to the Dental Hygiene Department before May 1.

Dental hygiene courses must be taken in the prescribed order. A deficient grade (D or F) in a dental hygiene course may prevent the student from enrolling in the next prescribed course.

The Associate of Science in Dental Hygiene requires the completion of all Dental Hygiene (5203) courses, specified supporting science classes, and general education requirements for the Associate of Science. Deviations from the suggested order of study must have adviser approval.

5203-100—Fundamentals of Dental Hygiene (S)

5 hrs. cr.

Introduction to the field of oral hygiene emphasizing: chairside patient education, principles of oral physiotherapy, hard and soft deposits of the teeth, principles of instrumentation, sterilization, and dental equipment. Dental hygiene procedures and techniques are practiced in the clinical environment. Two lectures; two 4 hour laboratories per week.

5203-140—Dental Morphology

1 hr. cr.

Detailed study of the tooth morphology of deciduous and permanent teeth as to fossal, cusps, grooves, ridges, roots and the relationship of form and function. Occlusion and malocclusion are studied according to their relationship to dental health. A self-instructional program supplemented by one lecture per week.

5203-150—Oral Histology and Embryology

3 hrs. cr.

5265-530 Oral Histology and Embryology Study of the gross and microscopic development of the teeth, supportive structures of the teeth, and embryology and anatomy of the head and neck region. Two lectures, one 3 hour laboratory per week.

5203-160—Dental Radiology (S)

2 hrs. cr.

The study of the theory and technique of exposing, developing, mounting and care of dental radiographs. Interpretation of radiograph findings is discussed. One lecture; three hours laboratory per week.

5203-190—Clinical Dental Hygiene I (Summer)

3 hrs. cr.

Introduces the student to the clinical practice of dental hygiene. The student gains experience in providing patient services through providing oral prophylaxes, taking and processing radiographs, presenting patient education, applying fluoride, charting the oral cavity, etc. Treatment and prevention of dental office emergencies will be covered in the lecture session. One lecture; twelve hours laboratory per week.

5203-200—Dental Health Education (F)

3 hrs. cr.

3255-200 - Dental Health Education (3) Fundamentals of teaching and learning theories are discussed. The student learns to develop teaching units and lesson plans for various public groups and/or organizations. Practical experience in public schools and community groups is included. The eight recognized dental specialties are discussed and their relationship to dental hygiene and preventive dentistry. Three hours lecture per week.

DENTAL HYGIENE

5203-210—Perio-Pathology (F)

3 hrs. cr.

Lectures and laboratory periods devoted to the study of all pathological conditions, etiology of diseases, degenerative process, inflammation, infection, and immunity. Etiology, classification, treatment, and prevention of periodontal disease will be stressed. Three lectures; one 1 hour laboratory per week.

5203-220—Dental Materials

3 hrs. cr.

The student will study and experience working with various restorative and impression materials used in dentistry. Two lectures; one 2 hour lab per week.

5203-290—Clinical Dental Hygiene II

5 hrs. cr.

Continuation of Clinical Dental Hygiene I with added responsibilities as skills develop. The student will have experience in extramural facilities such as public health department and clinics for mentally and physically handicapped. Lecture will include advanced dental hygiene techniques. One lecture; 16 hours laboratory per week.

5203-310—Nutrition (S)

2 hrs. cr.

Nutrition and diet are studied according to their relationship to dental health. Biochemistry of digestion and the utilization of nutrients is covered. The student will perform a diet analysis for a patient. Two lectures per week.

5203-320—Pharmacology (F)

2 hrs. cr.

Lectures on the sources of drugs, methods of their administration, modes of action, classification, dosage, therapeutic action, and drug interaction. Drugs affecting oral health are stressed. Two lectures per week.

5203-330—Ethics and Community Dentistry (S)

3 hrs. cr.

Study of professional ethics and commitment, professional organizations, state practice acts, and practical consideration of methods and problems associated with operating and maintaining a dental practice. The scope of public and dental public health will be defined and indentified. Consideration is given to philosophy, health legislation, federal, state, and local health programs, needs and demands for dental care and mechanisms for financing dental care. Three lectures per week.

5203-390—Clinical Dental Hygiene III

5 hrs. cr.

Continuation of Clinical Dental Hygiene II. Clinical experience in advanced clinical procedures and dental assisting procedures. Includes experience in extramural facilities. Lecture will include dental assisting techniques. One lecture, 16 hours lab per week.

DRAFTING AND DESIGN

Division of Technology

Coburn

The Drafting and Design curriculum is planned to provide students with the knowledge and skills necessary to enable them to obtain employment as draftsmen in the engineering and design departments of industry, with governmental agencies, consulting engineering firms, and architectural firms.

The Associate of Science in Drafting requires the completion of the General Education Courses (see page 56) plus the following: Drafting 100, 120, 130, 200, 210, 220, 230, and at least eight hours selected from the following: Drafting 498, Drafting 499, Machine 100, Wood 300, Comp 100, or Math 112. Electives should be selected with the assistance of the student's adviser from the areas of physical science, business, and mathematics.

COURSES OF INSTRUCTION

5304-110—Introductory Drafting (F,S)

3 hrs. cr.

An introduction to drafting, including the use of instruments, geometric construction, lettering, orthographic projection, dimensioning, sections and conventions, auxiliaries, pictorial drawing and print making. One hour lecture and four hours laboratory per week.

5304-120—Descriptive Geometry (S)

3 hrs. cr.

Practical applications of principles to problems of geology and mining, mechanical and architectural engineering. One hour lecture and four hours laboratory per week. Prerequisite: Draf. 110.

5303-130—Machine Drafting (F)

3 hrs. cr.

Detail and assemble drawing of machines, threaded fasteners, and gears. Use of machine tools, processes and materials. One hour lecture and four hours laboratory per week. Prerequisite: Draf. 110.

5304-200—Machine Design (F)

3 hrs. cr.

An introduction to machine design. Advanced drafting techniques and procedures. Elements of machines, drill jigs, fixtures, and sheetmetal blanking and piercing dies. One hour lecture and four hours laboratory per week. Prerequisites: Draf. 120 and 130.

5304-210—Production Illustration

3 hrs. cr.

Pictorial drawing with emphasis on application to both residential and commercial work. Methods of mechanical illustration, exploded views, design, and layout techniques. One hour lecture and four hours laboratory per week. Prerequisite: Draf. 110 or consent of instructor.

5304-220—Architectural Drafting (S)

3 hrs. cr.

An introduction to the fundamentals of architectural drafting. Instruction in the principles of design; building details and use of modern construction materials for both residential and commercial buildings. One hour lecture and four hours laboratory per week. Prerequisites: Draf. 110 or consent of instructor.

5303-230—Surveying & Mapping (S)

3 hrs. cr.

Theory, principles, and practices of surveying and mapping as applied to construction, site and right-of-way planning. Use and care of survey instruments and equipment. Survey reports and computations, and road construction will be stressed. One hour lecture and four hours laboratory per week. Prerequisite: Draf. 110 or consent of instructor.

5304-498—Seminar in Drafting & Design (demand)

1-3 hrs. cr.

Covers specialized knowledge and skills related to new developments in Drafting & Design. Topics will vary by the semester and situation. Prerequisite: An Associate Degree in Drafting & Design, or senior standing in management-technology or Industrial Arts.

5304-499—Independent Study in Drafting & Design (demand)

1-3 hrs. cr.

Individually directed reading, research and discussions in selected areas of Drafting for advanced majors. Scope, depth, area of concentration, and credit hours will be arranged upon entry into the course. Offered by arrangement. Prerequisite: Permission of instructor.

EARTH SCIENCE

(See Geology)

Earth Science certification within the BS in Education program requires 30 credit hours of sciences with 20 of those credit hours distributed among physical sciences, astronomy, and geology courses offered at the college. Studies in various other phases of earth sciences and geography are also offered. Students interested in teaching earth science should notify their faculty adviser.

ECONOMICS AND FINANCE

Division of Business Administration

Harbin, Jaswal, Larimore, Leitle, Leon, Marion, Miller

Look under General Business for requirements essential to earning a Bachelor of Science in Business Administration degree with a major in Economics and Finance.

0517-201—Principles of Economics (Macro) (F.S)

3 hrs. cr.

A study of aggregate economic performance with emphasis on national income stabilization and growth, business cycles, monetary and fiscal policy, international trade, comparative economic systems, and current economic problems. Prerequisite: Sophomore standing or permission.

0517-202—Principles of Economics (Micro) (F.S)

3 hrs. cr.

A study of fundamental institutions of the American Economy, the theory of price determination, and the theory of income distribution. Prerequisite: Sophomore standing or permission.

0504-300—Money and Banking (F.S)

3 hrs. cr.

355-356 Money and Banking (1,5) 3 hrs. cr.
The constituents, nature, functions, creation, and destruction of money and credit; the monetary institutions and their functions, with special emphasis on the commercial banking system and the Federal Reserve System; introduction to monetary theory and policy. Prerequisite: Econ. 201 and 202.

0517-302—Economic Growth and Development (S)

3 hrs. cr.

531.302 Economic Growth and Development (3) 3 hrs. cl.
Principles and problems involved in promoting development of the less mature economies, and growth in the more mature economies. Prerequisite: Econ. 201 and 202

0517-322—Business Statistics II (See Gen. Bus. 0503-322 Bus. Statistics II.)

0504-350—Financial Management (E S)

3 hrs cr

0304-330—Financial Management (1,5) 3 hrs. cr.
An examination of the financial structure of business organization, capital structure and methods of raising fixed and working capital; questions of financial policy, such as dividend policies and the conservation of surplus; comparative balance sheets and income-expense statements. Prerequisite: Econ. 201 and 202, Acct. 102.

0517-401—Microeconomic Analysis (F)

3 hrs cr

6317-401—Microeconomic Analysis (I) 3 hrs. cr.
An analytical study of the price systems, as affecting resource allocation and other welfare questions. Prerequisite: Econ. 201 and 202.

0517-402—Macroeconomic Analysis (S)

3 hrs. cr.

0317-402—Macroeconomic Analysis (3) 3 hrs. cr.
Study of the determination of the levels of real and monetary aggregate economic variables. Analysis of economic aspects of government regulation and direction of business enterprise. Prerequisite: Econ. 201 and 202.

COURSES OF INSTRUCTION

0505-411—Investments (F)

3 hrs. cr.

Principles underlying investment analysis and policy; salient characteristics of governmental and corporate securities; policies of companies and investing institutions; relations of investment policy to money markets and business fluctuations; security price-making forces. Prerequisite: Econ. 350.

0517-412—Urban and Regional Economics (S)

3 hrs. cr.

Introduction to analytical tools employed by economists in the study of the urban and regional economic environment. The course analyzes location theory and spatial distribution of economic activity, economic base theory, input-output techniques, urban problems, land use, growth and development, migration, regional policies and strategies. Prerequisite: Econ. 201 and 202.

0517-498—Seminar in Economics and Finance (demand)

1-3 hrs. cr.

A seminar for upper division majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission. Examples of seminars offered in the past are:

498-Seminar in Economic Resources

498-Seminar in International Economics

498-Seminar in Business Cycles

0517-499—Independent Study in Economics and Finance (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of economics and finance for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: Permission.

TEACHER EDUCATION

Division of Education and Psychology

Banks, Easterday, Highland, Mason, Niess, Richardson, Sandrin,
Snyder, Starkey, Steere, Wiley, Wuch

Realizing the important contributions made to our society by its educational system, Missouri Southern State College has made the preparation of teachers one of the basic objectives of the institution. The College faculty supports the objective by recognizing the preparation of teachers as the responsibility of the entire College. It is fulfilled through the Council on Teacher Education which coordinates the teacher education phase of the various instructional divisions. The Department of Education has the overall responsibility for the actual administration of the Teacher Education Program.

The Teacher Education Program is based on the following basic beliefs and assumptions:

1. A teacher should be provided a broad background in general education.
2. A teacher should be required to demonstrate an acceptable degree of mastery in his specialized teaching field.
3. A teacher should possess the personal qualities that can be identified as essential for effective teaching.
4. A teacher should demonstrate an understanding of the contribution education can make toward the continuation and improvement of our society.
5. A teacher should possess the professional attitudes and competencies necessary to serve the education profession effectively.

As a reflection of these beliefs and assumptions, the College seeks to achieve these aims through the Teacher Education Program.

1. To provide the graduates of high schools in the College service area with information on teaching as a profession.

EDUCATION

2. To identify and attract to the program of teacher education students who possess the intellectual, personal and physical qualities necessary to become effective teachers.
3. To provide a program of studies and experiences that will develop graduates capable of effectively performing their duties as teachers in the elementary or secondary schools.
4. To provide prospective teachers with a program that emphasizes the importance of the basic theories of learning in teaching.
5. To cooperate with local, state, regional, and national agencies that have as their purpose the improvements of education.
6. To aid school administrators, boards of education, and other educational organizations with problems relating to education programs.

Bachelor of Science in Education Degree

Students who are planning a career in teaching in the elementary and/or secondary school work toward the degree Bachelor of Science in Education. The satisfactory completion of the requirements for this degree qualifies a person for life certification in Missouri. Recipients of other degrees, who later decide to teach, can be certified through the State Department of Education by meeting the requirements outlined by the Director of Teacher Education.

Students deciding to work toward the degree Bachelor of Science in Education must elect to major in elementary education or in one of the subject matter areas available to those seeking a secondary certificate.

ADMISSION TO THE TEACHER EDUCATION PROGRAM

Admission to Missouri Southern State College does not automatically confer admission to the Teacher Education Program.

Students who plan to enter the professional education sequence and become certified teachers are required to apply for admission to the Teacher Education Program. This application is made at the time the student is enrolled in Psychology of Human Development or during the first year of study at this college. The application form may be obtained from the Education Office. Each application is reviewed individually by the Teacher Education Admissions Committee.

In determining a student's fitness for the teaching profession, the committee considers test results, scholarship, verbal proficiency, experience with children and youth, autobiography, physical and mental health, and appropriate faculty recommendations. The minimum scholarship essential to acceptance is a cumulative grade point average of 2.2 for 55 or more semester hours.

The Committee decisions on student applications fall into three categories: (1) Approved for admission to the teacher education program; (2) Approved on the condition that certain stated requirements be met; or (3) Advised not to continue in teacher education. The student must have acceptance into the program before he is admitted to the professional education sequence of courses.

Supervised Teaching

A second crucial point of screening in the Teacher Education program occurs when the student is ready to do supervised teaching during the "Professional Semester" of the senior year. To qualify for supervised teaching, the student must have a minimum 2.2 cumulative grade point average at the time of application and be recommended for student teaching by the major department and/or approved by the Teacher Selection Committee. The National Teachers Examination is taken by all persons who enroll in supervised teaching.

Advisement

Each student who enrolls at Missouri Southern State College will have an adviser assigned who will help the student plan his program of studies. A student above the

COURSES OF INSTRUCTION

sophomore level will have faculty advisers assigned by the division in which he chooses to specialize. The Division of Education advises majors in elementary education and physical education or those desiring to major in two different teaching fields at the secondary school level. All post-graduates seeking certification to teach are advised by the Division of Education.

Information regarding teacher certification requirements, employment opportunities, professional education requirements, and supervised student teaching may be obtained from the Department of Education.

TEACHER CERTIFICATION BY "ACADEMIC CONTRACT"

The Missouri State Department of Education has designed a procedure whereby college graduates who did not take a prescribed teacher education program in their degree programs can meet the necessary requirements to become a certified teacher by filing an "Academic Contract" with certain approved colleges and universities. The designated college is responsible for informing the State Department of Education what credit will be needed for certification and for the recommendation to issue the teaching certificate.

An "Academic Contract" may be executed with Missouri Southern State College on the condition that the person qualifies for admission into its teacher education program, has a signed statement of a teaching position from a school administrator, and has been properly enrolled in the college. All regular graduates of the teacher education program at Missouri Southern are awarded certification upon the recommendation of the Dean, Division of Education.

THE COUNCIL ON TEACHER EDUCATION

The Council on Teacher Education has a membership composed of both college faculty and elementary-secondary school personnel. The duties of the Council are to advise, approve, and evaluate programs leading to teacher certification at this college. Additionally, the Council serves as an appeal on matters related to teacher education admissions.

ELEMENTARY EDUCATION

If preparation for teaching at the elementary school level is desired, the student may emphasize either primary or intermediate grades. Elementary majors are required, also, to select an area of concentration of 21 semester hours from art, science (biological and physical), **early childhood education**, mathematics, social science, language arts (English and speech), music, health and physical education. Special education is offered as a second major area in support of elementary education. Applicable general education course requirements may also count toward the selected area of concentration.

A student specializing in elementary education must complete these additional or specific general education courses required for certification:

1. One additional course in mathematics.
2. Geography must be selected from Area 4, the Social and Behavioral Sciences
3. One additional course in U.S. History
4. An additional course in English Composition

Candidates for the degree Bachelor of Science in Education with a major in elementary education must satisfactorily complete 33 semester hours, including the following required courses: Bio. 310, Eng. 325, Music 332, Art 220, Eng. 315 or Eng. 301, Psy. 302, HPER 311, Educ. 470, Educ. 311, Educ. 312, Educ. 340, Educ. 322; select one of the following: Educ. 420 or Educ. 421 or Educ. 324 or Educ. 435 or Educ. 407.

Special Education—An area of concentration is offered in three areas of special education. Each of these programs is designed to support a major in either elementary or secondary education, preferably elementary. A major in Psychology-Special Education is also offered by the Psychology Department that leads to certification in selected special education areas for grades 1-12. Persons preparing to teach other

EDUCATION

subjects at the secondary level may also qualify for certification in any of the special education areas listed below along with their major. However, several basic elementary education courses will also need to be completed. Persons interested in such certification for teaching special education at the secondary level should check with the Department of Education for details and requirements. All persons preparing to teach in any special education area must complete supervised student teaching or a practicum in a special education setting.

The Mentally Retarded Child

To certify to teach the Educable and Trainable Mentally Retarded Child, the following additional courses must be satisfactorily completed: Psy. 110 (or one of: Psy. 300 and/or Psy. 301), Psy. 302, Educ. 324, Educ. 403, Educ. 406, Educ. 470, Speech 492 or Educ. 430, Psy. 412, Educ. 421 or Art 200, Educ. 444, Educ. 407, Educ. 420, Educ. 474. Select one from HPER 340, Psy. 382, Psy. 411, Psy. 432. In addition, the courses Educ. 312 and Educ. 340 must be completed if not previously completed. Note: By selecting Educ. 404 and 405 certification in three areas of special education is possible.

Learning Disabilities

For certification to teach children with Learning Disabilities, the following additional courses must be satisfactorily completed: substitute Educ. 404 for 403. Psy. 411 and HPER 340 should be selected requirements are the same as MR listed above.

Emotionally Disturbed Child

For certification to teach the Emotionally Disturbed Child, the following additional courses must be satisfactorily completed: substitute Educ. 405 for 403, and Educ. 404 in place of Educ. 406, Psy. 411 and HPER 340 should be selected as electives. Other requirements are the same as MR listed above.

Remedial Reading

A person who completes a baccalaureate degree with a teaching major may also be certified in the field of remedial reading by satisfactorily completing the following courses: Educ. 302, Educ. 340 or Educ. 422, Educ. 470, Psy. 412, Psy. 471, Educ. 471, Educ. 472.

SECONDARY EDUCATION

The student who desires to teach in a secondary school may choose to become qualified in a single teaching field with a high degree of specialization, or in two different teaching fields with a lesser degree of specialization in each. Available for secondary school teaching are:

- | | |
|-----------------------|----------------------------------|
| 1. Art | 9. Music |
| 2. Biology | 10. Physical Education |
| 3. Chemistry | 11. Physics |
| 4. Business Education | 12. Physical Science |
| 5. English | 13. Psychology-Special Education |
| 6. Industrial Arts | 14. Social Science |
| 7. Spanish | 15. Speech & Theatre |
| 8. Mathematics | |

A student may elect a supporting area (a minor) from any one of the listed majors. Under certain circumstances, it is possible for a person to become qualified to teach art, music, or physical education at both the elementary and secondary school level. Students interested in such a program should consult the department involved.

COURSES OF INSTRUCTION

Students interested in certification to teach **driver education** or to **coach interscholastic sports** should consult the Physical Education Department.

A student emphasizing secondary education must also complete departmental course requirements under either Plan A or Plan B.

Plan A: (Double Major)

This plan is intended for those persons who desire to qualify as teachers in two different subject matter areas. Each area requires 30 semester hours of specific course work which must meet minimum State Department of Education requirements. Plan A is not available in social science, music, or in programs preparing teachers for both elementary and secondary certification. **If Plan A is selected, the second teaching field is required.** Students may select an adviser in either department he chooses to major in or from the Department of Education.

Plan B: (Single Teaching Field, Comprehensive Major)

This plan is intended for the person who wishes to concentrate his teacher preparation in one subject matter area only. Forty or more semester hours are required in the subject matter area or related supporting courses listed in this catalog by the department.

A person choosing a single teaching field may also earn a minor of 21 semester hours of specific course work in some other or related field, which will qualify him for a second teaching field at only the junior high school level.

Each department that prepares students for secondary school teaching has developed a program of studies to be pursued by students who choose to follow either of the above plans. Plan B is mandatory for majors in social science, music, and in certain programs preparing students for dual certification at both the elementary and secondary school level.

PROFESSIONAL EDUCATION

The following sequence of courses is to be completed by students planning to teach at the secondary or elementary level:

Freshman-Sophomore Year

Three or more hours of development psychology selected from Psy. 110, Psychology of Human Development; Psy. 300, Child Psychology or Psy. 301, Adolescent Psychology is required. Persons who are planning to enter teaching should choose Psy. 110 in their first year of study. Secondary School majors seeking an extended teaching certificate which will also qualify them to teach the same area in the elementary school, must have a course in child development. Any person preparing at the secondary level must have either Psy. 110, Human Development or separate courses in General Psychology and Adolescent Psychology. Educ. 200, Exploratory Field Experience, may be taken between semesters in the sophomore year by enrolling for it at the spring registration.

Junior Year

*Psy. 310 Educational Psychology	3 hrs.
Select one combination from	
Educ. 320 Structure of Teaching, Elementary	2 hrs.
Educ. 321 Video Teaching Laboratory, Elementary	1 hr.
Or	
Educ. 330 Structure of Teaching, Secondary	2 hrs.
Educ. 331 Video Teaching Laboratory, Secondary	1 hr.

*May be taken sophomore year

EDUCATION

Senior Year

The "Professional Semester" occupies one complete semester. For one-half of the professional semester, the student studies five courses and during the other one-half does supervised teaching (approximately eight weeks). COURSES OUTSIDE THIS BLOCK MAY NOT BE SCHEDULED. Students are also discouraged from participation in outside activities during student teaching since this aspect of their program demands much time. Required courses are:

Secondary Teaching

- Educ. 462 Student Teaching, Secondary
- Educ. 432 Critical Issues in Education
- Educ. 402 History and Philosophy of Education
- Educ. 370 Intro to Instructional Media
- Educ. A Course in Special Methods of Teaching in the Major Field

Select one of the following:

- Psy. 412 Measurement and Evaluation
- Educ. 412 Social Foundations of Curriculum
- Educ. 420 Introduction to Counseling

Elementary Teaching

- Educ. 442 Student Teaching, Elementary
- Educ. 432 Critical Issues in Education
- Educ. 402 Philosophy and History of Education
- Educ. 322 Methods of Teaching Social Studies in Elem. School
- Educ. 370 Introduction to Instructional Media

Select one of the following:

- Psy. 412 Measurement and Evaluation
- Educ. 420 Introduction to Counseling
- Educ. 412 Social Foundation of Curriculum Development

Combination of Elementary and Secondary Teaching

For students majoring in art, music, foreign language, physical education, or psychology-special education who desire certification at both the elementary and secondary levels, the following professional semester is recommended:*

- Educ. 464 Student Teaching, Combination of Secondary and Elementary Teaching in major field
- Educ. 432 Critical Issues in Education
- Educ. 402 Philosophy and History of Education
- Educ. Special Methods Course in Major Field
- Educ. 370 Introduction to Instructional Media

Select one of the following:

- Psy. 412 Measurement and Evaluation
- Educ. 412 Social Foundations of Curriculum Development
- Educ. 420 Introduction to Counseling

*A course in Human Development or Child Psychology is required for certification for grades K-12. If Human Development is not taken, then both Adolescent and Child Psychology are required.

COURSES OF INSTRUCTION

EDUCATION COURSE OFFERINGS

0817-010—Techniques of Reading (F,S) 2 hrs. cr.

A reading improvement program consisting of group and individual work, intended primarily for students needing remedial work in reading. Individual diagnostic reading tests determine student needs. (Cannot be applied to any degree.)

0801-200—Exploratory Field Experiences (S) 1 hr. cr.

Students are assigned to elementary or secondary school for a minimum of fifty-four clock hours to serve as educational aids. The course provides the opportunity for the student to explore teaching as a potential career based on actual classroom experience. A student must have earned 34 hours of college credit to be eligible for this course. Assignments, normally, are made during the break during first and second semester. Prerequisite: Psych. 110, or Psy. 300, or 301. (May be repeated only once.)

0811-302—The Exceptional Child (S) 2 hrs. cr.

(See Psychology 302)

0801-310—Education in American Society (demand) 2 hrs. cr.

Designed especially for the non-education major who desires a more complete knowledge of the structure, function, purposes, and operation of the American education system. The course will include such topics as school finance, legal aspects of education, controversial issues, and educational trends. Extensive use will be made of visiting speakers and field trips.

0834-311—Science in the Elementary School (F) 2 hrs. cr.

Emphasis on science in the child's environment. Development of problems, activities, and experiments. Survey and evaluation of teaching materials and laboratory equipment suitable to the elementary school. Prerequisite: Courses in biological and physical science.

0833-312—Problems of Teaching Arithmetic in Elementary Schools (See Math 312) (S) 2 hrs. cr.

Basic course in the teaching of arithmetic in the elementary grades. The application of principles of learning and techniques of presentation are considered. Prerequisite: 3 hours math.

0823-316—Introduction to Early Childhood Education (F) 3 hrs. cr.

Students will become acquainted with programs specifically designed for early childhood. The course design will provide opportunities to observe young children in various programs to plan learning activities, and to employ these activities under the supervision of the instructor. Problems related to handicapped children in this age group are also studied. Prerequisite: Psy. 310.

0823-319—Early Childhood Education Curriculum and Materials (demand) 3 hrs. cr.

Course is designed to provide the student of early childhood education with a background in curriculum and materials for the young child. The student will have opportunities through the practicum to observe children involved in early childhood programs and to plan and conduct a lesson with children in each of the major curriculum areas, under supervision. The course will also provide the student opportunities to construct various teaching materials for early childhood education. Prerequisite: Psy. 310.

0802-320—Structure of Teaching-Elementary (F,S) 2 hrs. cr.

An integrated course including problems relating to teaching in the elementary school. The acquisition of instructional skills and strategies to the teacher-learner

EDUCATION

situation is expected. Classroom organization and management, instruction innovations, and both verbal and non-verbal interaction skills are studied. Actual classroom participation in a public school is required. The course is team taught. Enrollment in a video-teaching lab (Educ. 321) must be concurrent. Prerequisite: Psy. 300 or 301, and Psy. 310 and G.P.A. of not less than 2.2 admitted to teacher education.

0802-321—Video Teaching Laboratory (F,S) 1 hr. cr.

A required part of Educ. 320 and must be taken concurrently with it. Short teaching episodes are prepared, taught and analyzed via video-tape. The basic concern is with the demonstration of effective teaching skills. (Performance based, credit-non-credit grading.)

0842-322—Teaching Social Studies in Elementary School (F,S) 2 hrs. cr.

Provides an introduction to the instructional materials and methods of teaching social studies in the Elementary School. This course is part of the Professional Semester.

0808-324—Introduction to Special Education (F) 3 hrs. cr.

An introduction to the subject and career field of Special Education. The course is an over-view of all areas of special education but not intended as a methods course for any specific disability. Survey of research related to the areas of LD, EMR, TMR, and Social and Emotionally Disturbed. Prerequisite: General and Child or Adolescent Psychology, or Human Growth and Development; Psychology of Exceptional Child.

0803-330—Structure of Teaching-Secondary (F,S) 2 hrs. cr.

A study of the instructional skills, strategies and techniques of teaching in the secondary school. Development of the secondary school, classroom organization and management, instructional innovations, and both verbal and non-verbal interaction are studied. Actual participation in a public school classroom and field trips are required. The course is team taught. Enrollment in a video-teaching lab (Ed. 331) must be concurrent. Prerequisites: Psy. 300 and 301, or 110 and Psy. 310 and a G.P.A. of not less than 2.2 admitted to teacher education.

0803-331—Video Teaching Laboratory (F,S) 1 hr. cr.

A required part of Educ. 330 and must be taken concurrently with it. Short teaching episodes are prepared, taught, and analyzed via video-tape recordings. The basic concern is with the demonstration of effective teaching skills. (Performance based, credit-non-credit grading.)

0843-332—Teaching English and Language Arts in Secondary School (F,S) 2 hrs. cr.

Provides an introduction to the instructional materials and methods of teaching English, speech and foreign language in the secondary schools. This course is part of the Professional semester.

0834-333—Teaching Science in Secondary School (F,S) 2 hrs. cr.

Provides an introduction to the instructional material and methods of teaching science in secondary school. The course is a part of the Professional Semester.

0844-334—Teaching Social Science in Secondary School (F,S) 2 hrs. cr.

Provides an introduction to the instructional planning, materials, and methods of teaching social science in secondary school. The course is part of the Professional Semester.

0832-335—Teaching Music in Secondary School (F) 2 hrs. cr.

Provides an introduction to the instructional planning, materials, and methods of teaching music in secondary schools. The course is part of the Professional Semester.

COURSES OF INSTRUCTION

- 0838-336—Teaching Business in Secondary School (F,S) 2 hrs. cr.**
Provides an introduction to the instructional planning, materials, and methods of teaching business in the secondary school. The course is part of the Professional Semester.
- 0835-337—Teaching Art in Secondary School (F) 2 hrs. cr.**
Provides an introduction to the instructional planning, materials, and methods of teaching art in the secondary schools. The course is part of the Professional Semester.
- 0835-338—Teaching Health and Physical Education in Secondary School (F,S) 2 hrs. cr.**
Provides an introduction to the instructional planning, materials, and methods of teaching physical education and health in the secondary schools. The course is part of the Professional Semester.
- 0833-339—Teaching Mathematics in Secondary School (F,S) 2 hrs. cr.**
Provides an introduction to the instructional planning, materials, and methods of teaching mathematics in the secondary schools. The course is part of the Professional Semester.
- 0802-340—Language Arts and Reading in the Elementary School (F,S) 5 hrs. cr.**
Foundation course for development of understanding attitudes necessary to teach written and oral communication, listening and reading at the elementary level.
- 0839-341—Teaching Industrial Arts in Secondary School (F,S) 2 hrs. cr.**
Provides an introduction to curriculum, methods, and materials for teaching the various industrial arts in secondary school. The course is part of the Professional Semester.
- 0829-370—Introduction to Instructional Media (F,S) 2 hrs. cr.**
Designed to give the teacher a basic understanding of the preparation and use of the various audio-visual materials and devices, with emphasis on the preparation of such materials. Enrollment is limited to education majors. (Performance based-credit-non credit grading.)
- 0821-400—Philosophy and History of Education (F,S) 3 hrs. cr.**
Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to building a personal philosophy of education. Prerequisite: Admission to Teacher Education. Offered to special students.
- 0821-402—Philosophy and History of Education (F,S) 2-3 hrs. cr.**
Study of educational thinking and practices from the ancient to the present. Emphasis is on relating earlier educational thought to building a personal philosophy of education. Prerequisite: Admission to Teacher Education. Offered in the Professional Semester.
- 0810-403—Teaching the Mentally Retarded (F) 3 hrs. cr.**
Designed to help the prospective or in-service teacher understand mental retardation. Attention is given to courses, diagnosis, curriculum and teaching methods especially suited to mentally retarded children. Prerequisite: Psy. 302.
- 0810-404—Methods of Teaching Children with Learning Disabilities (S) 3 hrs. cr.**
Prepares teachers in the area of learning disabilities with particular attention to verbal communication disorders and visual motor integration problems. Diagnosis methodology techniques, curriculum, methods, and materials will be stressed. Prerequisite: Psy 302.

EDUCATION

0816-405—Methods of Teaching Children with Behavioral Disorders

3 hrs. cr.

Established a teaching rational utilizing a precision individualized teaching strategy which enables the emotionally disturbed learner to profit more fully from his school experiences. Prerequisite: Psy. 302.

0810-406—Teaching the Trainable Mentally Retarded (F)

3 hrs. cr.

Considers practices and problems in developing curriculum for trainable mentally retarded children and adolescents. Appropriate materials, organization and instructional processes are studied.

0829-407—Diagnostic and Prescriptive Teaching (S)

3 hrs. cr.

The course offers instruction in interpreting diagnostic information into an individualized prescription. Appropriate for regular classroom and special teachers. 2-3 hrs.

0829-412—Social Foundations of Curriculum Development (F,S)

2-3 hrs. cr.

Social Foundations of Curriculum and instruction as it relates to the elementary and secondary schools; consider the psychological, sociological, and philosophical basis for curriculum building. Emphasis is on social foundations. Prerequisite: Admission to Teacher Education.

0826-420—Introduction to Counseling (F,S)

2-3 hrs. cr.

Survey of counseling philosophies, principles and practices. Designed for the classroom teacher as well as the specialist in counseling or special educator. Intended for working with both students and parents. Prerequisite: Psy. 302.

0826-421—Introduction to Career and Occupational Information (F)

3 hrs. cr.

Designed for education majors with emphasis on teaching about career and occupational roles and their relationship to the world of work. Major thrust is to provide strategies which promote attitudes and habits that will assist youth in the making of choices and adjustments productive of personal satisfaction, effectiveness, and growth. Special emphasis is given to occupational problems of the handicapped. Prerequisite: Ed. 320 or 330.

0830-422—Teaching Reading in Secondary Schools (F)

2 hrs. cr.

Designed to help prospective teachers understand reading development and its part in the total school program. Required for certification of secondary teachers of English in Missouri. Prerequisite: Psy. 302.

0815-430—Language Development in Children (F)

3 hrs. cr.

Concerned with normal language development in children. Emphasis is placed on factors that interfere with speech and language development, especially for handicapped children. The development of articulation and human speech mechanism are also studied.

0827-432—Critical Issues in Education (F,S)

2-3 hrs. cr.

Current problems in the area of education are explored, with special regard to legal and professional role of school personnel, their relationship to federal and state governments, and to local school districts; certification, salary schedules, retirement and other benefits, professional organizations for teachers, relationship with administration, pupils, parents, and the community. Prerequisite: Admission to Teacher Education. Offered in the Professional Semester.

0829-435—Materials and Methods of Individualizing Instruction (S)

3 hrs. cr.

This course provides an introduction to the concepts, methods, and materials necessary to implement a program of individual instruction in the elementary or secondary school. Useful for those designing learning programs for exceptional children. Prerequisite: Educational Psychology and Structures of Teaching.

COURSES OF INSTRUCTION

0802-442—Student Teaching-Elementary (F,S) 6 hrs. cr.

Participation, under supervision, in teaching on the elementary level in an off-campus school. Prerequisites: 88 semester hours with a grade point average of 2.2, admission to the program of teacher education, and Educ. 320. Course assignments will include full-time supervised teaching for one-half of the semester. Students whose last names begin with the letters A-L should plan to enroll in first semester; M-Z in second semester. Conferences are scheduled as needed. Specific assignment is made by the Department of Education. Arrangements for assignment are to be made in semester preceding the actual student teaching block.

0802-443—Student Teaching—Elementary (F,S) 3 hrs. cr.

Participation, under supervision, on the elementary level in an off-campus school. Curriculum participation and observation consists of 15 hours per week for one half semester. Prerequisite: See Educ. 442. Arrangements for assignment should be made in semester preceding the actual student teaching block.

0802-444—Student Teaching—Special Education (F,S) 3-6 hrs. cr.

This course in which the trainee student teaches the handicapped child shall immediately follow Educ. 442 or 462 or 464. Prerequisite: See Educ. 442. Course assignment to consist of a minimum of 5 hours a week of student teaching for each one hour of credit, per one-half semester. Conferences will be scheduled as needed. Specific assignment is made by Department of Education.

0808-446—Practicum in Special Education (F,S) 3 hrs. cr.

Clinical experience directed toward providing students with an opportunity to work and interact with exceptional children in a variety of community facilities. Prerequisite: Ed 324 and 6 hours of Methods of Teaching Special Education.

0803-462—Student Teaching-Secondary (F,S) 6 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials and methods integrated with student teaching. Prerequisite: Educ. 330 or equivalent, fifteen semester hours in teaching field, and a minimum of 88 semester hours with a grade point average of 2.2. Assignment to consist of full-time teaching for one-half semester with professional courses to be taken during the other half of semester. Students whose last names begin with the letters A-L should plan to enroll in first semester; M-Z in second semester. Conferences are scheduled as needed. Specific assignment is made by Department of Education.

0803-463—Student Teaching-Secondary (F,S) 6 hrs. cr.

Participation, under supervision, in teaching on the secondary level in an off-campus school. Curriculum, materials, and methods integrated with student teaching. Prerequisites: See Educ. 462. Assignment to consist of daily three-hour block of time during a regular semester.

0803-464—Student Teaching-Combination (F,S) 3-6 hrs. cr.

Participation, under supervision, in teaching on the secondary and elementary levels in an off-campus school. Intended for those students in specialized area such as Art, Music, Psychology-Special Education, and Physical Education who are preparing to be certified for teaching their specialty at both levels. Curriculum, materials and methods integrated with teaching participation and observation. Assignments consist of a minimum five hours per week of participation and conferences for each hour of credit for one-half the semester. Specific assignments are made by Department of Education.

0830-470—Techniques of Diagnostic and Remedial Instruction in Reading (F,S) 2 hrs. cr.

A study of devices and techniques for diagnosis of reading disabilities and presentation of suggested remedial measures and methods of reducing deficiencies. Prac-

EDUCATION

tical applications and laboratory experience will be emphasized. Special emphasis upon intermediate, secondary, and the reading problems related to special education. Prerequisite: Educ. 340 or 442.

0830-471—Practicum in Diagnosis of Reading Difficulties (F) 3 hrs. cr.

Practice of administering, interpreting, and reporting of diagnostic test results of reading difficulties. Prerequisites: A methods course in the teaching of reading (Education 340 or Education 422), A Methods course in the analysis and correction of reading problems (Education 470), and a course in individual intelligence tests (Psychology 471).

0830-472—Practicum in Remediation of Reading Difficulties (S) 3 hrs. cr.

Practice of using and reporting results of remedial methods in a case study of reading difficulties. Prerequisites: A Methods Course in Teaching (Education 340 or Education 422), A Methods Course in the Analysis of Correction of Reading Problems (Education 470), and a course in the Individual Intelligence Tests (Psychology 471), and Education 471.

0825-474—Educational-Psychological Testing (S) 3 hrs. cr.

A comprehensive study of the various Psycho-Educational assessment techniques for diagnosis of learning problems of exceptional children, including educational, intelligence, and psychomotor. Emphasis will be placed on translating assessment data to remedial programs. (Same as Psy. 474). Prerequisites: Ed. 324, Psy. 310, Psy. 412.

0899-498—Seminar in Problems of Education (demand) 1-3 hrs. cr.

A seminar for upper division majors only. The seminar meets regularly each week. Meeting is equal to number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Advanced standing and consent of department head.

0899-499—Independent Study (F,S) 1-3 hrs. cr.

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by adviser and department head.

ENGLISH

**Division of Arts and Sciences
Department of Language and Literature**

Blevins, Couch, Crider, Curb, Denniston, Dinges, Gardner, Greenlee, Harder, Lambert, Mitchell, Morgan, Preble, Short, Slanina, Zuger

A major for the Bachelor of Arts degree consists of 42 semester hours (above freshmen composition) and must include Eng. 271, Eng. 272, Eng. 311, Eng. 312, either Eng. 301 or Eng. 400, and either Eng. 216 or Eng. 315.

English may be used as a minor or supporting area with certain majors. A minor consists of 21 semester hours (above freshman composition) and shall include 12 upper division hours. The student shall select the courses in consultation with an English adviser.

A major for the Bachelor of Science in Education degree with one teaching field (Plan B) consists of 42 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng. 271, Eng. 272, Eng. 311, Eng. 312, Eng. 315, Eng. 319, either Eng. 301 or Eng. 400, either Eng. 450 or Eng. 451; one course from Eng. 410, Eng. 415, Eng. 420; one course from Eng. 425, Eng. 430, Eng. 435; one course from Eng. 345, Eng. 360, Eng. 370, Eng. 380.

COURSES OF INSTRUCTION

A major for the Bachelor of Science in Education degree as one of two teaching fields (Plan A) consists of 30 semester hours of English (above freshman composition) and Education 422. Required English courses are Eng. 271, Eng. 272, Eng. 311, Eng. 312, Eng. 315; either Eng. 301 or Eng. 400; either Eng. 450 or Eng. 451.

English 101 is a prerequisite to all English courses except Eng. 180 and Eng. 181. English 102 or 111 is a prerequisite to all upper division literature courses. A lower division literature course is prerequisite to all upper division literature courses except Eng. 311 and Eng. 312.

1501-100—Composition (F,S)

5 hrs. cr.

A course designed for students whose placement scores indicate a need for special help and individual attention. Successful completion of goals of the course content and a satisfactory score on the **Minimum Essentials Test** permits the student to enroll in English 102. It is strongly recommended that any student who completes the course with a D enroll in English 101 before attempting English 102.

1501-101—Composition (F,S)

3 hrs. cr.

A study of the principles of effective writing based largely upon expository models. Successful completion of the goals of the course content and a satisfactory score on the **Minimum Essentials Test** permits the student to enroll in English 102. Students demonstrating exceptional ability may be permitted to substitute English 111.

1501-102—Composition (F,S)

3 hrs. cr.

Continued development of writing skills. Initiation, development, and completion of a research paper. Prerequisite: English 101.

1501-111—Composition (F)

3 hrs. cr.

A special composition course for freshmen demonstrating exceptional proficiency on placement tests. With a grade of C or better in English 111, a student automatically receives three hours credit for English 101, thereby satisfying the six-hour composition requirement. Should he receive a D in English 111, however, he must take English 102.

1503-180—Masterpieces of World Literature (F,S)

3 hrs. cr.

Selected masterpieces of world literature through the Renaissance, except British literature.

1503-181—Masterpieces of World Literature (F,S)

3 hrs. cr.

Selected masterpieces of world literature from the Renaissance to the present, except British literature.

1507-216—Creative Writing (F)

3 hrs. cr.

Experimental writing in prose, poetry, and drama. A study of the writer's roles and technical approaches to literature in order to develop creative writing skills. Prerequisite: Eng. 102.

1502-271—English Literature (F,S)

3 hrs. cr.

Survey of English literature from its beginnings to the Romantic Movement.

1502-272—English Literature (F,S)

3 hrs. cr.

Survey of English literature from the Romantic Movement to the present.

1599-298—Explorations in Literature (S)

3 hrs. cr.

Studies in a variety of literary subjects. Each offering of the course on a different topic. English majors may not count the course more than one time toward their English hours requirement.

ENGLISH

- 1501-301—Modern Grammar (F,S)** 3 hrs. cr.
An investigation of current grammatical studies of modern English structure and usage, emphasizing transformational generative grammar.
- 1502-311—American Literature (F,S)** 3 hrs. cr.
A survey of American literature from its beginnings to the Civil War.
- 1502-312—American Literature (F,S)** 3 hrs. cr.
A survey of American literature from the Civil War to the present.
- 1501-315—Exposition (F,S)** 3 hrs. cr.
A study of the techniques of factual writing and the writing of non-fiction. Recommended for all students especially those entering professional schools. Prerequisite: Six hours composition.
- 1501-319—Composition for Teachers (F,S)** 3 hrs. cr.
Designed to aid the prospective teacher of English in formulating principles of composition and in applying them to teaching in the secondary school.
- 1502-325—Children's Literature (F,S)** 3 hrs. cr.
A reading, lecture, and observation course for elementary education students, including evaluation of children's literature, its historical development, and its uses in the elementary school. This course does not count toward an English major.
- 1502-330—Literature for Adolescents (F)** 3 hrs. cr.
An extensive reading course for secondary education students, including some evaluation of literature for adolescents and its presentation in the secondary school.
- 1502-340—Black American Literature (S)** 3 hrs. cr.
All representative literary genres illustrating the growth of Black American literature.
- 1502-345—The American Novel (S)** 3 hrs. cr.
The growth of the American novel featuring representative works of authors such as Hawthorne, Twain, and Faulkner.
- 1502-350—Recent American Literature (F)** 3 hrs. cr.
A study of the major movements in American literature since World War II.
- 1502-360—Twentieth Century Drama (F)** 3 hrs. cr.
Plays in English from Shaw to the present, with selected readings of European and American works.
- 1502-370—Twentieth Century Poetry (F)** 3 hrs. cr.
Representative Poetry from Yeats to the present. (Formerly Eng. 481.)
- 1502-380—The English Novel (F)** 3 hrs. cr.
Development of the English novel from 1700 to the present, featuring representative works from authors such as Austen, Dickens, and Joyce.
- 1502-400—History of the English Language (S)** 3 hrs. cr.
An examination of the ancestors of English and the effect of other languages, peoples, and cultures upon its development. An investigation of the phonology, morphology, syntax, and usage of the language throughout its history.
- 1502-410—Medieval English Literature (F)** 3 hrs. cr.
Literature of England in the Anglo-Saxon and Middle English periods. Emphasis upon Chaucer. Prerequisite: Eng. 271.

COURSES OF INSTRUCTION

1502-415—Renaissance and Restoration		
Non-Dramatic Literature (F)		3 hrs. cr.
Study of English poetry and prose from 1500 to 1700. Prerequisite: Eng. 271.		
1502-420—Renaissance and Restoration Drama (S)		3 hrs. cr.
Study of English drama from 1500 to 1700 (excluding Shakespeare) with emphasis on the Elizabethan and Jacobean theatres. Prerequisite: Eng. 271.		
1502-425—Eighteenth Century English Literature (S)		3 hrs. cr.
The enlightenment and the decline of neoclassicism in literature from 1700 to 1785, Pope to Johnson. Prerequisite: Eng. 271.		
1502-430—The Romantic Period (F)		3 hrs. cr.
English literature from 1798 to 1832. Literary tendencies and representative authors from Wordsworth through Keats. Prerequisite: Eng. 272.		
1502-435—The Victorian Period (S)		3 hrs. cr.
English literature from 1832 to 1901. Literary tendencies and authors such as Tennyson, Browning, and Arnold. Prerequisite: Eng. 272.		
1052-450—Shakespeare (F)		3 hrs. cr.
Selected poems, histories, and comedies and their continuing relevance. Prerequisite: Eng. 271.		
1502-451—Shakespeare (S)		3 hrs. cr.
Selected tragedies, romances, and problem plays reflecting enduring dramatic and human truths. Prerequisite: Eng. 271.		
1502-455—Milton (On demand)		3 hrs. cr.
A study of his English poetry and selected prose. Prerequisite: Eng. 271.		
1599-498—Seminar in Literature (On demand)		3 hrs. cr.
For advanced majors. Topic open.		
1599-499—Independent Study (F,S)		1-3 hrs. cr.
Individually directed study in selected areas for advanced majors. Prerequisite: a grade point average of 3.0 in English. Registration must be approved by adviser, department head, and division dean.		

ENVIRONMENTAL HEALTH TECHNOLOGY

Division of Technology

G. Elick, Tillman

The college offers the four year Bachelor of Science in Environmental Health Technology. An Associate of Science degree (two year) in Environmental Health Technology is described further under Associate of Science Programs in this catalog. Two options in the Bachelor of Science in Environmental Health Technology program are available:

- Option I
 Water and Wastewater Management
- Option II
 Institutional and Community Health

Option I requires three academic years of study at Missouri Southern State College preceded or followed by successful completion of 48 weeks of training at the Water and Wastewater Technical School, Neosho, Missouri. Required courses besides

ENVIRONMENTAL HEALTH TECHNOLOGY

general education requirements are Bio. 101, Bio. 112, Bio. 122, Bio. 211 or Bio. 231, Bio. 312, Bio. 370, Bio. 306 or Bio. 431 and Bio. 442 or approved substitute, Chem. 101, Chem. 102, Chem. 162, Chem. 201, Chem. 300, Acct. 101, Econ. 201, MM 350 and MM 352. Fees for this program are the same as fees for any other students at the respective schools. These fees are stated in the current catalogs of each institution. The student holds membership in only one student body at a time.

Option II requires four complete academic years of study at Missouri Southern State College including a one semester 12 credit hour practicum which may be spent at one or more of the following establishments: hospitals, other health facilities, regulatory agencies or with local health related industries. Plans for the practicum with the adviser should be made during the spring semester of the junior year at MSSC. Required courses besides general education requirements are Bio. 101, Bio. 112, Bio. 122, Bio. 211 or Bio. 231, Bio. 312, Bio. 370, Bio. 306. or Bio. 431 and Bio. 442 or an approved substitute, Chem. 101, Chem. 102, Chem. 162, Chem. 201, Chem. 300, Geol. 110 or Geol. 300, Acct. 101, Econ. 201, MM 350, MM 352 and EHT 450.

1299-450—Practicum in Environmental Health (F,S)

12 hrs. cr.

A course designed to allow students to gain experience through actual observation and work at health facilities, health regulation agencies and/or industrial plants where environmental health is a viable concern. Periodic meetings between the MSSC coordinator, the cooperating institution and the student will be required. The student should not be employed in any job that will not allow full-time, maximum concentration on the academic practicum. Prerequisite: Senior standing in the Environmental Health or Biology curricula.

FOREIGN LANGUAGES

Division of Arts and Sciences Department of Language and Literature

Bodon, Carney, Colon

The Department of Language and Literature offers a full curriculum of courses in Spanish, with supporting courses in French and German. A language laboratory is used in all beginning courses.

A major for the Bachelor of Arts degree in Spanish consists of 40 semester hours and includes the same courses as for the Bachelor of Science in Education degree in the following paragraph.

A major for the Bachelor of Science in Education degree with Spanish as the single teaching field (Plan B) consists of 40 semester hours. The required courses are Span. 101-102, Span. 201, Span. 202, Span. 301, Span. 302, Span. 321, Span. 322, Span. 332, Span. 421, Span. 431, and Span. 434.

A major for the Bachelor of Science in Education degree with Spanish as one of two teaching fields (Plan A) consists of 31 semester hours. The required courses are Span. 101-102, Span. 201, Span. 202, Span. 301, Span. 302, and one course out of Span. 321, 322 or 332.

A minor in Spanish consists of 21 semester hours (not adequate for a teaching certificate in the language unless one has a major in another language) and includes Span. 101-102, Span. 201, Span. 202, Span. 301 or 302, and one course out of Span. 321, 322, or 332.

FRENCH

1102-101—Beginning French (F)

5 hrs. cr.

Conversation, pronunciation, essentials of grammar and diction. Language laboratory required.

COURSES OF INSTRUCTION

1102-102—Intermediate French (S)	5 hrs. cr.
Spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required.	
1102-201—Readings in French Literature (F)	3 hrs. cr.
Intermediate reading. Discussion of literature in French. Emphasis on vocabulary building. Grammar review. Prerequisite: Fren. 102 or equivalent.	
1102-202—Advanced Readings in French Literature (S)	3 hrs. cr.
Representative works read and discussed in French. Short stories, a novel and poetry. Prerequisite: Fren. 201 or equivalent.	
1102-301—French Composition (F)	3 hrs. cr.
Practice in writing French accompanied by a thorough study of grammar and syntax. Prerequisite: Fren. 202 or equivalent.	
1102-302—Advanced French Composition (S)	3 hrs. cr.
Practice in writing French compositions. Thorough study of grammar, syntax, and idiomatic expressions. Prerequisite: Fren. 301.	
1102-321—Survey of French Literature (On demand)	3 hrs. cr.
Study of French Literature from its origins through the seventeenth century. Prerequisite: Fren. 302 or equivalent.	
1102-322—Survey of French Literature (On demand)	3 hrs. cr.
French Literature of the eighteenth, nineteenth and twentieth centuries. Prerequisite: Fren. 321.	

GERMAN

1103-101—Beginning German (F)	5 hrs. cr.
Stresses conversation, pronunciation, essentials of grammar and diction. Language laboratory required.	
1103-102—Intermediate German (S)	5 hrs. cr.
Stresses spoken language, vocabulary building, pronunciation proficiency and grammar essentials. Language laboratory required.	
1103-201—Reading in German Literature (F)	3 hrs. cr.
Intermediate reading. Discussion of literature in German. Emphasis on vocabulary building. Grammar review. Prerequisite: Ger. 102 or equivalent.	
1103-202—Advanced Readings in German Literature (S)	3 hrs. cr.
Representative works are read and discussed in German with emphasis on conversation, syntax and literary significance. Prerequisite: Ger. 201 or equivalent.	

SPANISH

1105-101—Beginning Spanish (F,S)	5 hrs. cr.
Conversation, reading, and writing. Pronunciation proficiency and grammar essentials. Conducted in Spanish as far as practicable. Language laboratory required.	
1105-102—Intermediate Spanish (F,S)	5 hrs. cr.
Continuation of Spanish 101.	
1105-201—Intermediate Readings and Conversation (F,S)	3 hrs. cr.
Reading and discussion of literature. Emphasis is on vocabulary building and grammar review.	
1105-202—Introduction to Spanish Literature (F,S)	3 hrs. cr.
Representative works are read and discussed in Spanish with emphasis on conversation, syntax, and literary significance. Prerequisite: Span. 201.	

FOREIGN LANGUAGE

- 1105-301—Spanish Composition (F)** 3 hrs. cr.
Practice in writing Spanish accompanied by a thorough study of grammar and syntax. Prerequisite: Span. 202.
- 1105-302—Advanced Spanish Composition (S)** 3 hrs. cr.
Practice in writing Spanish accompanied by thorough study of grammar and syntax with emphasis on subtle elements of idiomatic usage. Prerequisite: Span. 301.
- 1105-321—Survey of Spanish Literature (F)** 3 hrs. cr.
The literary background and important writers from the origin of Spanish literature to 1700. Representative works are read and discussed critically, with written and oral reports. Prerequisite: Span. 202.
- 1105-322—Survey of Spanish Literature (S)** 3 hrs. cr.
The literary background and important writers from 1700 to the present. Prerequisite: Span. 202.
- 1105-332—Introduction to Spanish American Literature (S)** 3 hrs. cr.
Representative poetry, short stories, and essays are read and discussed. Prerequisites: Span. 301, Span. 302.
- 1105-421—Nineteenth Century Spanish Novel (F, Odd)** 3 hrs. cr.
The Spanish novel as an art form, exemplified by selected works by such writers as Alarcon, Valera, Pereda, Galdos, Pardo-Bazan, Palacio Valdes, and Blasco Ibanez. Prerequisite: Span. 322.
- 1105-431—Don Quixote (S)** 3 hrs. cr.
The source, structure, characters, language and style of Cervantes' masterpiece. Prerequisite: Span 321.
- 1105-434—The Spanish American Novel (F, Even)** 3 hrs. cr.
Origin and development of the Spanish American novel, its political, social, geographical, and literary influences. Prerequisite: 20 hours of Spanish.

GENERAL SCIENCE

Certification for teaching general science at the 7-12 grade levels is obtainable at MSSC. Students preparing for a BS in Education with majors in Biology, Chemistry, Physics, or Physical Science should include at least four credit hours of geology in their program. General science as a second teaching field for other majors requires 21 credit hours in science with at least four credit hours in geology. Additional courses in biology (8 hours), chemistry (5 hours), and physics (5 hours) are likewise required. Students with this option in mind should notify their faculty adviser.

GEOGRAPHY

**Division of Arts and Sciences
Department of Social Science**

Gockel (Emeritus), Smith

- 2206-211—Regions and Nations (F,S)** 3 hrs. cr.
A survey of the peoples of the earth and how their activities are influenced by climate, topography and natural resources.

COURSES OF INSTRUCTION

2206-311—Political Geography (S,Odd) 3 hrs. cr.

A study of the geographic factors which have influenced international relations and the policies of nations as political units. Geopolitics, religion, racial and ethnic groupings and other factors which contribute to unity or disunity will be emphasized.

2206-322—Economic Geography (F,Even) 3 hrs. cr.

A study of world commodities and the geographic factors which affect their production and make them significant to the world economy.

2206-412—Geography of Latin America (F,Odd) 3 hrs. cr.

A study of the physical regions and natural resources of South America, Latin America, Central America and the Caribbean Islands with special emphasis on current problems and relations with the United States.

2206-422—Geography of the United States and Canada (demand) 3 hrs. cr.

A geographic analysis of the United States and Canada with emphasis on regional variations of social, economic and physical phenomena.

2206-498—Seminar in Geography (On demand) 1-3 hrs. cr.

The study and analysis of selected topics in regional, urban-economic, cultural or physical geography. Prerequisite: Regions and Nations (Geog. 211) or the consent of the instructor.

GEOLOGY

Division of Arts and Sciences

Elick

1914-110—Introduction to Geology (S) 5 hrs. cr.

The materials of the earth and those forces producing physiographic changes. Three lectures and two, 2-hour laboratory for field trips a week.

1914-300—Earth Environments (demand) 4 hrs. cr.

A course describing aspects of the solid earth, the liquid environments of earth and our atmosphere. Interactions of these and their relationships to human society will also be discussed. Prerequisite: Physics 100.

1914-320—Historical Geology (demand) 4 hrs. cr.

A comprehensive study of the history of the earth, the fossil record, and physical features resultant from earth dynamics of the past. Prerequisites: Physics 100, Geology 110.

1914-498—Studies in Geology (On demand) 1-3 hrs. cr.

A seminar for upper division students only. The class will meet regularly a minimum number of hours each week equal to the number of credit hours. The course is designed to give specialized instruction in some discipline of geology not normally covered in other courses. Prerequisite: junior standing, Geol. 110 and a minimum GPA of 2.5 in 8 hours of biology and 8 hours of chemistry. Permission of the instructor required.

1914-499—Problems in Geology (On demand) 1-3 hrs. cr.

Consists of individual work under the supervision of a staff member with the credit and hours to be arranged. Problems may be undertaken in any field of geology with adequate preparation and the consent of the supervising instructor. Prerequisite: a minimum G.P.A. of 3.0 in 20 hours of science, Geol. 110, and a proven past interest in geology.

HEALTH FACILITIES ADMINISTRATION

Division of Technology

Courses in this field are designed to give individuals currently in management or supervisory positions in health care facilities, or those individuals planning to attain such positions, an insight into the applications of the principles of Administration and Management techniques to these institutions.

5218-200—Health Facilities Administrator and Management (demand)

3 hrs. cr.

The principles and practice of the administration of health facilities. Includes a study of the various types of facilities and their relation to each other and problems of administration and management unique to such facilities. Three one-hour lectures per week.

5218-210—The Administration and Management of the Long-Term Care Facility (demand)

3 hrs. cr.

The problems unique to the long-term care facility including responsibilities for patient welfare, the relation to other health care facilities and to governmental agencies of various levels. Prerequisite: HA 200 or consent of the instructor. Three one-hour lectures per week.

HISTORY

Division of Arts and Sciences Department of Social Science

Cooper, Holman, Hughes, Markman, Murphy, Renner, Schafer, Smith

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor of Arts degree. A history major for this degree consists of 30 semester hours. The requirements are: Hist. 110, Hist. 120, Hist. 200, Hist. 205 or 210, 6 upper division semester hours in United States History, 6 upper division semester hours in European History and 6 upper division hours in history electives.

History may also be used as a minor or supporting area with certain majors. The requirements are 21 semester hours: Hist. 110, Hist. 120, Hist. 200, Hist. 205 or 210 and 9 upper division hours in history.

A social science major for the Bachelor of Science in Education degree, with an emphasis in history, consists of 49 semester hours. (Plan B must be followed with this major, see Education, page 100.) The requirements are: Hist. 110, Hist. 120, Hist. 200, Hist. 205 or 210, PSc. 120, 6 upper division semester hours in United States History, 6 upper division hours in European History and 6 upper division semester hours in history electives. For the remaining 16 hours the candidate will choose Econ. 201 and at least one course in political science, one course in sociology and two courses in geography. See page 100 for teacher education requirements.

2205-110—United States History 1492-1877 (F,S)

3 hrs. cr.

A survey of the United States from the "Age of Discovery and Exploration" through reconstruction.

2205-120—United States History 1877 to the Present (F,S)

3 hrs. cr.

A continuation of course 110. This course surveys the economic, social and political development of the United States from 1877 to the present.

2205-200—Western Civilization to 1500 (F,S)

3 hrs. cr.

A survey of the development and progress of western civilization from prehistoric times through 1500. The course surveys the contributions of the early peoples to civilization as well as feudalism, the Church, the crusades and the Renaissance.

COURSES OF INSTRUCTION

2205-205—Europe 1500 to 1815 (F)

3 hrs. cr.

A survey study of Europe from the Renaissance and the Reformation to Waterloo. Emphasis is placed on the origin and development of the modern states system after 1500 as well as the social and cultural developments of the era. (Formerly 201.)

2205-210—Europe 1815 to the Present (S)

3 hrs. cr.

A survey study of Europe in the 19th and 20th centuries. Emphasis is placed on political, social and economic developments accelerating the growth of liberalism, nationalism and imperialism. (Formerly 202.)

2205-300—Ancient History (S,Odd)

3 hrs. cr.

A study of ancient times from the prehistoric period to the end of the Roman Empire. Special consideration is given to the Ancient Empires and their contributions to literature, art, religion and science against a political, economic and social background. Prerequisite: Hist. 200, 205 or 210. (Formerly Hist. 321.)

2205-305—United States Social and Intellectual History (On demand)

3 hrs. cr.

A study of ideas that have influenced the intellectual, cultural and social aspects of United States History from colonial times to 1877. Prerequisite: Hist. 110. (Formerly Hist. 301.)

2205-310—United States Social and Intellectual History (On demand)

3 hrs. cr.

A continuation of History 305. A study of the society and ideas of the United States during the period of its great industrial expansion and emergence as a major world power. Prerequisite: Hist. 110 or 120. (Formerly Hist. 302.)

2205-315—Economic History of the United States (F)

3 hrs. cr.

A study of the development of the American Economy and its related institutions from the early national period to the present. Prerequisite: Hist. 110 or 120. (Formerly Hist. 331.)

2205-320—Medieval History (S,Even)

3 hrs. cr.

A study of Europe from the end of the Roman Empire to 1500. Emphasis is placed on the significant historical aspects of the medieval period such as feudalism, the Church, the Crusades and the Renaissance. Prerequisite: Hist. 200, 205 or 210. (Formerly Hist. 322.)

2205-325—The American Frontier (F,Odd)

3 hrs. cr.

The westward expansion of the United States and its effects upon the social, political and economic institutions until the close of the frontier in 1890. Prerequisite: Hist. 110 or 120. (Formerly Hist. 341.)

2205-335—Diplomatic History of the United States to 1900 (F,Odd)

3 hrs. cr.

A study of the diplomatic relations of the United States and the related development of its foreign policy from 1775 to 1900. Prerequisite: Hist. 110 or 120. (Formerly Hist. 381.)

2205-340—Twentieth Century Diplomacy (S,Odd)

3 hrs. cr.

A historical investigation of United States diplomacy and the world of our time. The course emphasizes the increasing importance of the United States in World Affairs since it became a world power. Prerequisite: Hist. 110 or 120. (Formerly Hist. 382.)

2205-345—Age of Jefferson and Jackson (F,Even)

3 hrs. cr.

The course will concentrate on early political development in the United States. It will trace the evolution of the presidency over the first years of the new government

HISTORY

studying the triumph of Jeffersonian ideas, social threads in the period, and the rise of nationalism. Prerequisites: Hist. 110 or 120.

2205-350—Civil War and Reconstruction (F, Odd) 3 hrs. cr.

A study of the causes of the Civil War, slavery, and reform movements before the Civil War. Students will trace the development of Reconstruction, rise of the "Solid South," and political developments of the era. Prerequisites: Hist. 110 or 120.

2205-355—The South (S, Odd) 3 hrs. cr.

A survey of the social, economic, political, and intellectual history of the southern United States concentrating on tracing the distinctive characteristics of the section and attempting to discover how a consciousness of the region's separateness evolved.

2205-360—History of Missouri (S, Odd) 3 hrs. cr.

A study of Missouri's growth from its early settlement to the present. Emphasis is placed upon political, economic, institutional, and social development. Prerequisites: Hist. 110 or 120.

2205-365—The English Colonies in America (F, Even) 3 hrs. cr.

A study of the progress and development of the English Colonies from 1492 to 1776. Emphasis is placed on the extension of English social, political and economic institution as a background for the American Revolution. Prerequisite: Hist. 110. (Formerly Hist. 361.)

2205-370—Europe Since 1919 (S, Odd) 3 hrs. cr.

The aftermath of World Wars I and II in Europe. Emphasis is placed on the formation of the League, collective security, a study of the totalitarian systems, the United Nations and current problems of world peace. Prerequisite: Hist. 200. (Formerly Hist. 352.)

2205-375—English History to 1660 (F, Even) 3 hrs. cr.

A survey of the rise and development of the English people from the Roman conquest to the Stuart Restoration. Emphasis is placed upon English Constitutional development and related institutions. Prerequisite: Hist. 200. (Formerly Hist. 371.)

2205-380—English History from 1660 (S, Odd) 3 hrs. cr.

A continuation of History 375. This is a survey of English History from the Restoration to the Present. Attention is placed on the development of the cabinet system and the emergence of modern political democracy. Prerequisite: Hist. 200. (Formerly Hist. 372.)

2205-385—History of Russia and the Soviet Union (F, Odd) 3 hrs. cr.

A survey approach to the history of Russia from pre-Tsarist times to the present. Emphasis will be placed on the land and the people, national characteristics, political institutions. The Nineteenth and Twentieth centuries will be given special consideration. Prerequisite: Hist. 110 or 120; 200, 205, or 210.

2205-390—History of Germany (S, Odd) 3 hrs. cr.

A survey approach to the social, political, military, and economic history of Germany, with major concentration on the post 1519 period. Emphasis will be placed on the decline of the Medieval Empire, princely absolutism, national unification, Weimar Republic, Third Reich, and post World War II Germany. Prerequisites: Hist. 110 or 120; 200, 205, or 210.

2205-405—The United States 1870-1920 (F, Odd) 3 hrs. cr.

A study of the United States at the turn of the century. The impact of the industrial revolution and its effect on social, political and economic institutions, the Progressive Movement and World War I. Prerequisite: Hist. 110 or 120. (Formerly Hist. 451.)

COURSES OF INSTRUCTION

2205-410—the United States Since 1920 (S,Even) 3 hrs. cr.

A study of the impact of politics, diplomacy and industrial development of the United States during the five decades since 1920. Prerequisite: Hist. 110 or 120. (Formerly Hist. 452.)

2205-415—History of China (F,Even) 3 hrs. cr.

A survey of modern China. Special emphasis is placed on Chinese society, political developments and relations with the west in the 19th and 20th centuries. Prerequisites: Hist. 110 or 120. (Formerly Hist. 481.)

2205-420—United States Constitutional History (S,Even) 3 hrs. cr.

A study of the growth and development of the United States Constitution from 1787 to the present. Prerequisite: Hist. 110 or 120. (Formerly Hist. 462.)

2205-425—The Renaissance and the Reformation 1300-1650 (On demand) 3 hrs. cr.

A study of the political, economic, religious and social development of Europe from the Crusades through the Reformation. The course reviews early European society and institutions and traces the replacements of these by the modern state system and capitalism and the reformation of the Church. Prerequisite: Hist. 200, 205, or 210. (Formerly Hist. 431.)

2205-430—History of Japan (On demand) 3 hrs. cr.

A survey of modern Japan. The course traces Japan's history from the middle of the 19th century to the present. Special attention is given to the development of Japan and the world reaction to it as it came into contact with western culture. Prerequisite: Hist. 200, 205 or 210. (Formerly Hist. 482.)

2205-435—The Era of the French Revolution and Napoleon (F,Even) 3 hrs. cr.

A study of Europe during the period of revolution and reaction, 1789-1815. Emphasis is placed on the French Revolution, the rise and fall of Napoleon and their manifestations for the future. Prerequisite: Hist. 200, 205, or 210. (Formerly Hist. 491.)

2205-440—European Intellectual History (S,Even) 3 hrs. cr.

A study of the intellectual, cultural and social occurrences in Europe from the Italian Renaissance to the French Revolution. Emphasis is placed on the Age of Enlightenment, significant effects of the French Revolution, Nationalism, Socialism, and mass warfare upon European civilization in the 19th and 20th centuries. Prerequisite: Hist. 200, 205 or 210.

2205-450—English Constitutional History (demand) 3 hrs. cr.

The development of English political and legal institutions with emphasis on the Anglo-Norman background, the rise of parliament, Tudor absolutism, the Stuart period of revolution, development of the Cabinet, nineteenth century democratization, and evaluations resulting from the crisis of the Twentieth Century. (Formerly Hist. 461.)

2205-498—Seminar in History (demand) 3 hrs. cr.

A seminar for upper division social science majors. The topics and methods covered in the seminar will be those not included in other courses. Emphasis will be placed upon the individual student's ability to research, assimilate, and present new areas of knowledge. Permission of the instructor is required.

2205-499—Independent Study (F,S) 1-3 hrs. cr.

An independent study course structured by the adviser with the approval of the department head and Division chairman. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by the department head and division dean.

INDUSTRIAL ARTS

Division of Technology

Adams, Coburn, Gelso, Morris, Schultz

The Industrial Arts curriculum leads to the degree of Bachelor of Science in Education with a major in Industrial Arts. The student must meet the requirements for Option I, or II, complete the required Industrial Arts courses listed below, meet the general education requirements of the College, and complete the professional education requirements for a teaching certificate. Students majoring in Industrial Arts may take any course in the Division of Technology for which they have the necessary prerequisites.

Industrial Arts majors should apply to the Department of Education for admission to teacher education during the second semester of their sophomore year. See Teacher Education section of this catalog for criteria for admission to teacher education and to the professional semester.

Option I Area Major Specialization

The major consists of 45-48 semester hours. The student who wishes to specialize in one instructional area of the Department of Industrial Arts will satisfy the following requirements: (1) The required Industrial Arts courses; (2) a minimum of 21 semester hours in the area of specialization; and (3) three six-hour sequences selected from separate instructional areas.

Option II Area Major General Industrial Arts

The major consists of 45-48 semester hours. The student who wishes to specialize in General Industrial Arts will satisfy the following requirements: (1) The required Industrial Arts courses; and (2) five sequences of six hours each selected from separate instructional areas.

Option III Minor in Industrial Arts

A person choosing a single teaching field may also earn a minor of 21 semester hours in Industrial Arts courses consisting of the following required courses. This meets the Missouri Certification requirements for Grades K-9. Mach. 100, Draf. 110 and Draf. elective, IA 300, IA 301, IA 320, and IA 330.

A major in Industrial Arts requires the completion of the General Education courses (see page 54) plus the following courses: 6 hours of Drafting, 6 hours of Machine Technology, 4 hours of Electricity (IA 320 or Auto. 120), 6 hours of Wood, IA 330, IA 335, and 18 hours of Industrial Arts electives.

The Industrial Arts major will choose the sequences to meet requirements from the instructional areas listed below. The first two courses listed in each area will satisfy the six hours sequences, except where otherwise designated.

Automotive Technology: 100, 120, 200, 220, 250

Drafting and Design: 110, 120, 130, 200, 210

Electricity: Auto. 120 or IA 320

Machine Technology: 100, 110, 210, 260

Graphics, Jewelry and Silversmithing: 200, 205, 230 (Art Department)

Industrial Arts majors may select additional courses from the Division of Technology and count these courses as part of the Industrial Arts major with the approval of the student's advisor.

Industrial Arts majors must select twelve upper division hours within their department.

0800-300—Woodworking and Wood Construction (F)

3 hrs. cr.

A study of the basic woodworking tools and machines and their safe and efficient use and care with special attention given to the designing, construction, and finishing of projects involving the use of the tools and machines studied. One hour lecture; four hours laboratory per week.

0800-301—Wood Technology, Processes and Products (S)

3 hrs. cr.

A study of wood technology—including manufacturing of lumber, seasoning, grading, buying, properties, structure and characteristics of wood. A study of the

COURSES OF INSTRUCTION

special processes and techniques and products used and produces in the woodworking industry including wood lamination, peg diffusion, wood flour and particle moulding, wood plastic composition (WPC), ammonia bending, mass production, use of jigs and fixtures. Students will design and finish projects involving use of special processes, techniques, jigs, fixtures. One hour lecture; four hours laboratory per week.

0800-320—Applied Electricity-Electronics (S)

4 hrs. cr.

A study of the circuits, tools and equipment used in the electricity-electronics field and the application of these principles and equipment to industry. Emphasis is placed on safety in electricity, basic concepts, electrical quantities, common D C circuits, cells, and batteries, magnetism, basic measuring instruments, alternating current, inductance, transformers, capacitance, resistance, and capacitance in A C circuits, generators, motors, application of electricity residential wiring, electricity for communication, construction of demonstration apparatus. Two hours lecture; four hours laboratory per week.

0800-330—General Industrial Arts Shop (S)

3 hrs. cr.

A general industrial arts course designed to strengthen the student's knowledge of the application of tools, materials, information and the construction and manufacturing processes used in the area of Industrial Arts Education. One hour lecture; four hours laboratory per week. Prerequisite: Student must have completed field requirement in at least three areas of Industrial Arts.

0800-335—Shop Organization and Management (S)

3 hrs. cr.

Types of shop organization, equipment, and supply; sources, selection and arrangement of equipment, shop plans, inventories, accounting records, reports, requisitions, and specifications. Three hours lecture per week. Prerequisite: At least 15 hours of Industrial Education.

0800-498—Seminar in Industrial Arts (demand)

1-3 hrs. cr.

A seminar for upper division Industrial Arts majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission of instructor.

0800-499—Independent Study in Industrial Arts (demand)

1-3 hrs. cr.

Individually directed reading, research, and projects in selected areas of Industrial Arts for advanced majors. Scope, depth, and area of concentration and credit will be arranged upon entry into the course. Offered by arrangement. Prerequisite: Advanced standing in Industrial Arts field or permission of instructor.

JOURNALISM

**Division of Arts and Sciences
Department of Language and Literature**

Massa

The journalism program provides training for the student desiring to work in the communications media, for the education major who will advise newspaper and yearbook staffs, and for the student who plans to transfer to a school of journalism. While pursuing a bachelor's degree at Missouri Southern, a student may accumulate 25 hours in journalism. The education major can qualify for state certification. The student headed for a journalism school can test his interest in a career in this field by enrolling in a course or two and by working on the college newspaper, **The Chart**.

To receive the Bachelor of Arts degree with a major in English, and a minor in journalism, the student must complete the English major requirements and 21 hours in the supportive area of journalism, as approved by the Division Dean.

JOURNALISM

To receive the Bachelor of Science in Education degree with a major in English and certification in journalism, the student must complete the requirements for a major in English and accumulate 15 hours in the supportive area of journalism, as approved by the Division Dean.

Students expecting admission to a school of journalism their junior year should follow the schedule recommended for the freshman and sophomore years of candidates for a Bachelor of Arts degree with a major in English. They must have 13 hours in one foreign language and principles of economics.

0602-111—News Writing (F,S) 3 hrs. cr.

A study of news of some complexity; editing, copy reading and proofreading. Practical work on the college newspaper, **The Chart**.

0602-121—Mass Communications (F) 2 hrs. cr.

A study of the history and development of the mass communications industry and its role in the political, social and economic life of the present. Brief study of the professional requirements and vocational opportunities in the field of journalism.

0602-220—Practical Journalism (F,S) (Per sem) 1 hr. cr.

Application of journalistic principles to the college newspaper or the college year-book. One hour of credit each term for a maximum of three terms. Prerequisite: Jour. 111 or consent of instructor.

0602-231—Feature Writing (F) 3 hrs. cr.

Advanced courses in writing special articles for newspapers and magazines. Practical work on college publications. Prerequisite: Jour. 111 or consent of instructor.

0602-232—Editing and Editorial Writing (S) 3 hrs. cr.

Principles of copy reading and editing. Students work in major positions of responsibility on the staff of **The Chart**. Prerequisite: Jour. 111.

0603-241—Radio and Television News Writing (S) 3 hrs. cr.

Techniques of preparing radio and television newscasts, including reporting, writing, editing, and illustrating newscasts. Prerequisites: Jour. 111, Speech 102.

0602-302—Photo-Journalism (F) 3 hrs. cr.

Theory and practice of photo-journalism. Students work on the photography staff of **The Chart** and deal with the application of photography to the news media. Prerequisites: Jour. 111 and a knowledge of photography, including developing and printing techniques.

0602-312—Publication Principles (S) 3 hrs. cr.

Editorial and production practices of newspapers. Advanced laboratory work in the publication of **The Chart**. Some attention is paid to problems of high school journalism. Prerequisite: Jour. 111.

LAW ENFORCEMENT

Division of Technology

Mosher, Seneker, Spurlin, Terry, Whittle, Williams

The Associate of Science degree in Law Enforcement prepares students for entrance into police work, a field which has become highly specialized and complex at the local, state and national levels. Modern law enforcement responsibilities make academic preparation beyond the high school level essential.

Many law enforcement agencies have specific requirements regarding minimum age, height, weight, vision and other related requisites. Students interested in this

COURSES OF INSTRUCTION

field should check with appropriate agencies regarding their requirements. Students considering a major in this field should schedule a conference with the Director of Law Enforcement Programs before enrolling.

The Associate of Science in Law Enforcement requires the completion of the general education courses (see page 55) plus the following: PSc 120, Soc. 110, 210, 351, 412, Psy. 100, 221, HPER 160, 220, LE 100, 110, 150, 190, 200, 210, 250, and 290. Electives should be selected, with advisor approval, from the fields of literature or science.

5505-100—Introduction to Law Enforcement (F,S)	3 hrs. cr.
Municipal, county, state and federal police organizations. History and administration of justice. Responsibilities and opportunities in the field of law enforcement.	
5505-110—Police Organization and Administration (F)	2 hrs. cr.
Management operations, communications, budgeting, recruiting, training and public relations as they pertain to the local and state law enforcement agencies.	
5505-150—Interview and Report Writing (S)	2 hrs. cr.
The techniques of interviewing and writing the report. Legal considerations for criminal interrogations. Use of basic report forms and records systems.	
5505-190—Supervised Police Work (Summer)	6 hrs. cr.
The student spends a specific amount of time in the local police department, the local sheriff's department, and with other area agencies learning the standard line activities. The purpose is to introduce the student to the actual duties of law enforcement officers. Prerequisite: LE 100, LE 110, LE 150.	
5505-200—Criminal Investigations (F)	3 hrs. cr.
Fundamentals of criminal investigation techniques including crime scene procedures, burglary, and death investigation. Includes collection, preservation, identification of evidence and overview of crime lab procedures.	
5505-210—Criminal Procedures (F)	3 hrs. cr.
Criminal law procedures from arrest through trial. Search and seizure, laws of evidence, review of pertinent supreme court decisions and related topics. The order of criminal trial.	
5505-250—Criminal Law (S)	3 hrs. cr.
Criminal law purposes and functions; laws concerning arrest, search, and seizure. Rights and duties of officers and citizens in relation to local, state and federal laws. The development, application and enforcement of laws.	
5505-290—Police Supervision and Management (S)	3 hrs. cr.
Principles of personnel management as applied to law enforcement agencies; evaluation, promotion, discipline, training, employee welfare, and problem-solving leadership.	
5505-498—Seminar in Law Enforcement Topics (demand)	3 hrs. cr.
A survey of current advances in the field. Precise topics to be announced. Prerequisite: Associate Degree in Law Enforcement and senior standing or consent of instructor.	

MACHINE TECHNOLOGY

Division of Technology

Schultz

Missouri Southern State College offers an Associate of Science in Machine Technology. The specialized course work in this curriculum is designed to prepare

MACHINE TECHNOLOGY

students for employment in the metal working industries. General education courses provide growth as an individual and for constructive living in the family and nation.

The curriculum is college oriented. Students following this curriculum are regular members of the college student body and are expected and encouraged to participate in extracurricular activities.

The Associate of Science in Machine Technology requires the completion of the general education courses (see page 55) plus the following: Draf. 101, 130, Mach. 100, 110, 160, 210, 240, and 260.

5315-100—Introduction to Machine Tool Processes (F) 5 hrs. cr.

An introductory course covering the operation, safety, set-up and theory of the five basic machine tools, the lathe, drill press, milling machine, grinders, shaper and planers, and the basic theory and operation of heat treatment and inspection equipment. Two one-hour lectures; three three-hour laboratories per week.

5315-110—Advanced Machine Tool Processes (S) 5 hrs. cr.

The study and use of attachments and accessories for basic machine tools and the introduction of production machines and methods; screw machines, turret lathe, tracer lathes, gear hob, electrical discharge machines, and chemical milling. Two one-hour lectures; three three-hour laboratories per week. Prerequisite: Mach. 100.

5315-160—Process Instrumentation (F) 2 hrs. cr.

Teaches quality control, inspection and precision measurement procedures. Utilizes air and electronic gauging systems, optical measurement and related math. One one-hour lecture; one two-hour laboratory per week.

5315-210—Fundamentals of Cutting Tools (S) 5 hrs. cr.

Introduction to tool geometry, chip formation and effects of coolants and tool design on tool life. Instruction on the sharpening of standard cutting tools for drilling and on the applications of various factors on machinability. The use of carbides and ceramics as cutting tools. Two one-hour lectures; three two-hour laboratories per week. Prerequisite: Mach. 110.

5315-240—Fundamentals of Toolmaking (S) 5 hrs. cr.

Advanced course on the designing, machining, and manufacturing of production tools and dies and jigs and fixtures. Prerequisites: Mach. 110 and Draf. 110. Two one-hour lectures; seven hours laboratory per week.

5315-250—Numerical Control in Machining (demand) 3 hrs. cr.

The introduction to point-to-point and continuous path numerical control, part programming, operation of numerical control systems, and justification and maintenance of numerical control systems. One one-hour lecture; two two-hour laboratories per week. Prerequisites: Mach. 110, Mach. 150, and Draf. 110.

5315-260—Fundamentals of Metallurgy (F) 2 hrs. cr.

Introduction to ferrous and non-ferrous metallurgy. Studies the physical properties of the various alloys, heat treatment of them, chemical properties of metals, applications of the various metals, machinability, tensile strength and hardness testing, and study of the grain structure of the various alloys. One one-hour lecture; one two-hour laboratory per week.

5315-498—Seminar in Machine Technology (demand) 1-3 hrs. cr.

Covers specialized knowledge and skills related to new developments in machine technology. Topics will vary by the semester and situation. Prerequisite: Senior standing in management-technology and having the Associate Degree in Machine Technology.

COURSES OF INSTRUCTION

5315-499—Independent Study in Machine Technology (demand) 1-3 hrs. cr.

Individually directed reading, research, and discussions in selected areas of Machine Technology, for advanced majors. Scope, depth, and area of concentration and credit will be arranged upon entry into the course. Offered by arrangement. Prerequisite: Permission of the instructor.

MARKETING AND MANAGEMENT

Division of Business Administration

Harbin, Johnson, Larimore, Leon, Marion, Miller, Tiede

Look under General Business for requirements essential to earning Bachelor of Science in Business Administration degree with the Marketing and Management major. In the same place find the requirements for the Bachelor of Science in Education degrees with a Business Education major.

0509-300—Principles of Marketing (F,S) 3 hrs. cr.

A survey of the major marketing methods, institutions and practices. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing, pricing, marketing research and marketing cost are treated from the standpoint of consumers, middlemen and manufacturers. Prerequisite: Econ. 202.

0509-312—Retailing (F,S) 3 hrs. cr.

Principles of successful retail management; analytical and research methods applicable to problems of retail management. Prerequisite: MM 300.

0509-321—Salesmanship (F) 3 hrs. cr.

Principles and methods of effective personal and industrial selling. Course also stresses practical aspects through actual sale presentation by the students which are videotaped and critiqued according to the basic selling principles. Prerequisite: MM 300, Principles of Marketing.

0506-350—Principles of Management (F,S) 3 hrs. cr.

A course in universal organization and management theory with application of concepts and techniques to specific realistic case situations. Prerequisite: GB 101.

0515-352—Personnel Management (F,S) 3 hrs. cr.

A study of the principles and practices of management with emphasis on the human factors, including procurement, development and maintenance of an effective work force. Prerequisite: MM 350 or consent of instructor.

0509-401—Promotional Strategy (F,S) 3 hrs. cr.

Description of fundamental advertising principles and their application in mass marketing. Analysis of advertising media, the preparation of advertising, and formulation of campaigns. Prerequisite: MM 300.

0590-412—Marketing Management (F) 3 hrs. cr.

Managerial aspects of marketing; problems involved in investigations of markets, planning the sales effort, management of sales and service personnel, and control of sales operations. Prerequisite: MM 350 and MM 300.

0506-431—Production Management (F) 3 hrs. cr.

Principles and decision analysis related to the effective utilization of the factors of production in manufacturing activities for both intermittent and continuous systems. The study of production organizations, analytical models and methods, facilities design, and the design of control systems for production operations. Prerequisite: MM 350.

MARKETING AND MANAGEMENT

0509-432—Consumer Behavior (S)

3 hrs. cr.

An interdisciplinary approach to the analysis and interpretation of consumer buying habits and motives, and the resultant purchase of goods and services. The course stresses the buyer's psychological, economic, and socio-cultural actions and reactions. Prerequisite: MM 300, Principles of Marketing, MM 401 Promotional Strategy and/or consent of the instructor.

0506-441—Organizational Behavior (S)

3 hrs. cr.

Study of managers and workers and their behavior in an organizational environment. Organization structure, management process, and technology are viewed as they affect human behavior. Motivation, leadership, group interaction, communication are stressed. Case method and experiential exercises are used extensively to supplement lectures. Prerequisite: MM 350, Principles of Management.

0506-452—Business Policy (S)

3 hrs. cr.

An integrating course cutting across all fields of business administration. Cases pertaining to top management decision making are used. Prerequisites: MM 300, MM 350, Econ 350, Senior standing. This course must be taken in the last semester of college work.

0509-470—Marketing Research (S)

3 hrs. cr.

A course involving the systematic gathering, recording and analyzing of data relating to (1) market analysis, (2) sales analysis, (3) consumer research, and (4) advertising research. Prerequisite: GB 321 and 6 hrs. of Marketing.

0509-498—Seminar in Marketing and Management (demand)

1-3 hrs. cr.

A seminar for upper division marketing and management or related majors with topics to be announced each time the course is offered. Prerequisite: Senior standing or permission.

0509-499—Independent Study in Marketing and Management (demand)

1-3 hrs. cr.

Individually directed readings, research, and discussions in selected areas of marketing and management for advanced majors. Scope, depth, area of concentration and credit to be arranged upon entry into course. Offered by arrangement. Prerequisite: G.P.A. of 3.0 in major field and permission.

MATHEMATICS

Division of Arts and Sciences

Allen, Boehning, Elick, Jolly,
Livingston, Martin, Mulkey, Scruggs, Subramanian

A major for the Bachelor of Science degree consists of 39 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, plus 21 upper division hours in mathematics. In addition, 18 hours in physical sciences (excluding Chem. 100, Phys. 100, and Geol. 110).

A major for the Bachelor of Science in Education with mathematics as one teaching field (Plan B) consists of total of 33 semester hours in mathematics. The required courses are: Math 150, Math 250, Math 260, Math 300, and 15 upper division hours in mathematics. In addition, 10 hours in the physical sciences (excluding Chem. 100, Phys. 100, and Geol. 110) are required. See page 100 for teacher education requirements.

A major for the Bachelor of Science in Education degree with mathematics as one of two teaching fields (Plan A) consists of 30 semester hours. The required courses are: Math 150, Math 250, Math 260, Math 300, and 12 upper division hours in mathematics. See page 100 for teacher education requirements.

COURSES OF INSTRUCTION

1701-20—Beginning Algebra (F,S) 3 hrs. cr.

A beginning algebra course with a review of basic arithmetic and practical applications. No credit towards baccalaureate degree.

1701-30—Intermediate Algebra (F,S) 3 hrs. cr.

A course in intermediate algebra for students deficient in algebra. No credit towards a baccalaureate degree.

1701-110—Introduction to College Mathematics (F,S) 3 hrs. cr.

Basic college mathematics with an introduction to various areas of mathematics such as computer programming, consumer mathematics, linear programming, probability, and geometry. This course satisfies the requirement in mathematics for general education. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 20 with a grade of C.

1701-111—Mathematics for Elementary Teachers I (F,S) 3 hrs. cr.

A study of the real number system and its subsystems. Prerequisite: One year of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 20 with a grade of C. (Will not meet general education mathematics requirement for non-elementary education majors.)

1701-112 Trigonometry (demand) 3 hrs. cr.

A study of trigonometric and logarithmic functions, complex numbers, with applications. Prerequisite: One and one half units of high school algebra, one unit high school geometry, and satisfactory score on the Mathematics Placement Test, or permission of the instructor.

1701-120—Mathematics for Elementary Teachers II (F,S) 3 hrs. cr.

Sets of points, metric and non-metric geometry, relations, and functions, probability. Recommended for prospective elementary teachers. Prerequisite: Math 111.

1701-130—College Algebra (F,S) 3 hrs. cr.

A study of linear equations, radicals and exponents, quadratic equations, inequalities, theory of equations, and the binomial theorem. Prerequisite: One and one half units of high school algebra, one unit of high school geometry and satisfactory score on the Mathematics Placement Test, or Math 30 with a grade of C.

1701-131—Finite Mathematics (F,S) 3 hrs. cr.

An introduction to finite mathematics with algebra that is designed for business, social science, and computer science students. Algebra, logic, set theory, probability, matrices, with applications to business and social sciences. Prerequisite: One and one half units of high school algebra and satisfactory score on the Mathematics Placement Test, or Math 30 with a grade of C.

1701-140—Algebra and Trigonometry (F,S) 5 hrs. cr.

This course is the equivalent of Math 112 and Math 130. Prerequisite: One and one half units of high school algebra, one unit of high school geometry or permission of the instructor and satisfactory score on the Mathematics Placement Test.

1701-150—Calculus with Analytic Geometry I (F,S) 5 hrs. cr.

Differentiation and integration of algebraic functions and plane analytic geometry using vectors. Prerequisite: Math 140 with a grade of C, or four units of high school mathematics and a satisfactory score on the Mathematics Placement Test.

1701-250—Calculus with Analytic Geometry II (F,S) 5 hrs. cr.

Differentiation and integration of transcendental functions and trigonometric functions, polar coordinates, theory of limits and continuity, parametric equations. Applications to physical problems. Prerequisite: Math 150 with a grade of C.

MATHEMATICS

- 1701-260—Calculus with Analytic Geometry III (F,S)** 5 hrs. cr.
Solid analytic geometry, indeterminant forms, infinite series, partial differentiation and multiple integrals. Prerequisite: Math 250 with a grade of C.
- 1701-300—Fundamentals of Mathematical Thought (S)** 3 hrs. cr.
An introduction to modern algebra and analysis. Sets, relations, functions, logical development of number systems, introduction to theory of groups, rings, integral domains and fields. Prerequisite or corequisite: Math 260.
- 1701-302—Calculus for the Management and Social Sciences (demand)** 3 hrs. cr.
Calculus applications of differentiation and integration in business and social sciences. Prerequisite: Math 130, or Math 131, or two years high school algebra and satisfactory score on the Mathematics Placement Test. Will not count toward a major in mathematics.
- 1702-310—Elementary Statistics (demand)** 3 hrs. cr.
A course intended to provide a basic statistical background for the various majors for advanced study in their specialties. Topics to be covered include data reduction, measures of central tendency, linear regression, correlation, and hypothesis testing, with applications to social, managerial, biological, and physical sciences. This course satisfies the general education requirements in mathematics. Prerequisite: two years high school algebra or Math 130. Will not count toward a major in mathematics.
- 0833-312—Problems of Teaching Arithmetic in the Elementary Schools** 2 hrs. cr.
(See Education 312 for description.) Will not count toward a major in mathematics.
- 1701-322—Differential Equations (S)** 3 hrs. cr.
Standard types of ordinary differential equations of the first and second order, linear equations with constant coefficients and applications to geometry and physical science. Prerequisite: Math 260.
- 1701-332—Geometry (F)** 3 hrs. cr.
Concentrated Euclidian geometry theory from a modern axiomatic viewpoint. Includes an introduction to projective and non-Euclidean geometrics. Recommended for prospective secondary mathematics teachers. Prerequisite: Math 250.
- 0833-339—Teaching Mathematics in Secondary School (S)** 2 hrs. cr.
(See Education 339 for description.) Will not count toward a major in mathematics.
- 1701-340—Advanced Engineering Mathematics (demand)** 3 hrs. cr.
A course in advanced techniques in Algebra and Analysis. Includes matrix algebra, eigenvalues and eigenvectors, bilinear and quadratic forms, Bessel function, Legendre, Laguerre, and Hermite polynomials, Fourier series. Prerequisite: Math 260.
- 1701-342—Abstract Algebra (F,Odd)** 3 hrs. cr.
Number theory, equivalence and congruence, theory of groups, rings, ideals, integral domains, and fields. Prerequisite: Math 300.
- 1703-350—Introduction to Numerical Analysis (S,Odd)** 3 hrs. cr.
Error Analysis, solution of polynomial and transcendental equations, co-location polynomials, matrix methods, numerical differentiation and integration. Prerequisite: Math 250 and Comp. 120.
- 1701-351—Linear Algebra (S,Even)** 3 hrs. cr.
The algebra of linear equations and matrices, vector spaces, linear mappings and transformations, determinants, bilinear and quadratic forms, linear functionals, vector inner products and cross products. Prerequisite or corequisite: Math 300.

COURSES OF INSTRUCTION

1702-361—Introduction to Probability (F) 3 hrs. cr.

Introduction to theory of probability using concepts and methods of calculus. The binomial and Poisson Probability measures. The central limit theorem. Prerequisite: Math 260.

1701-412—Vector Analysis (S,Even) 3 hrs. cr.

Vector spaces, linear transformations, determinants, eigenvalues and diagonalization of symmetric matrices, curl, divergence, gradient, multiple integrals and the theorem of Green, Gauss and Stokes. Corequisite: Math 260.

1701-421—Advanced Calculus I (F,Even) 3 hrs. cr.

A rigorous review of elementary calculus: Real number systems, continuous functions, functions of several variables, implicit functions. Prerequisite or corequisite: Math 300.

1701-422—Advanced Calculus II (S,Odd) 3 hrs. cr.

Coordinate transformations, vectors, multiple integrals, Green's theorem, theory of integration, differential equations, Fourier Series. Emphasis on theory rather than applications. Prerequisite: Math 421.

1703-431—Numerical Analysis (F,Even) 3 hrs. cr.

Fundamental numerical analysis theorems, Error Analysis, data approximation techniques, difference calculus, numerical solution of differential equations. Prerequisite: Math 322 and Comp. 120.

1799-498—Seminar in Mathematics (demand) 1-3 hrs. cr.

A seminar for upper division math or related majors. The class meets regularly each week. Meeting times per week are equal to the number of credit hours determined by the department for a given semester. The course is designed to give both broad and specialized knowledge of the discipline. Prerequisite: Advanced standing in major field and consent of department head.

1799-499—Independent Study (demand) 1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head and division chairman. Prerequisite: Advanced standing in the major field with a grade point average of 3.0 Registration must be approved by the advisor, department head, and division dean.

MEDICAL TECHNOLOGY

Division of Technology

(See combined/affiliated degree programs, page 163)

MILITARY SCIENCE

Division of Technology

Thomas, Garlock, Schalavin, Rogers

The Military Science Department directs and administers the Army Reserve Officers Training Corps (ROTC) program by joint agreement between MSSC and the US Army. The primary objective is to prepare qualified students for military service as officers in the Army Reserves or Regular Army while earning a college degree.

The Basic Courses, 111, 112, 121, and 122 are open to all students on campus. They are elective courses and incur no military obligation. These courses or any of the following may qualify students for Advanced ROTC:

MILITARY SCIENCE

- a. ROTC Basic Camp
 - b. ROTC Summer Practicum at MSSC
 - c. Two or more years active military duty in the Army, Navy, Air Force or Marines.
 - d. Three or more years JROTC.

d. Three or more years JROTC.

Selected students who have completed one of the above may enroll for the advanced program. A minor in Military Science may be obtained by completion of not less than 16 hours of MS courses to include: MS 301, 302, 411 and 412 (non-certifiable).

Advanced course and all scholarship students receive \$100 per month plus pay and travel to one summer camp. Scholarship students have all tuition, books, and fees paid by the US Army. Total financial assistance for the non-scholarship students is approximately \$2400 and for 3-year scholarship students approximately \$4500.

Three, two and one-year scholarships are available to qualified students who are enrolled in ROTC. Complete information may be obtained at the Military Science Department.

Any required equipment or textbooks are provided by the US Government.

Should the Draft be reinstated qualified basic course students may request an ROTC deferment from the Selective Service induction. If approved by the Professor of Military Science, the student must agree in writing: to apply for and enroll in the advanced course if selected, accept a commission if offered and serve on active duty for a period of three years if required. Advanced course students sign similar deferment agreements.

1801-111—Military Adventure Training (F,Odd) 2 hrs. cr.

1801-112—Military Team Skills (S,Even) 2 hrs. cr.
Introduction to basic skills in rappelling, survival training, pistol marksmanship and military job opportunities. One-hour lecture; two-hour lab per week.

1801-121—Individual Military Skills I (F,Even) 2 hrs. cr.
Introduction to basic skills in orienteering, mountaineering techniques, rifle marksmanship and military job opportunities. One-hour lecture; two-hour lab per week.

1801-122—Individual Military Skills II (S, Odd) **2 hrs. cr.**
Introduction to basic skills in land navigation, rappelling, pistol marksmanship, camping safety and sanitation and military job opportunities. One-hour lecture; two-hour lab per week.

1801-190—Basic ROTC Summer Practicum (Sum) 1-6 hrs. cr.
A practical course designed to meet the needs of sophomores desiring to enroll for advanced ROTC. A varied number of credits are available depending on the needs of the students. The course will cover mountaineering, map reading, survival, basic physical conditioning, basic drill, combatives and job opportunities in the Army.

1801-298—Seminar in Military Science (ROTC Basic Camp) (Sum) **8 hrs. cr.**
An in-depth study of the Military Science courses normally taught on college campus during the Freshman and Sophomore year. Course taught at Ft. Knox, KY.

1801-301—Leadership and Management I (F) 3 hrs. cr.
Leadership, its principles, responsibilities and techniques. Functions of the leader; special problems in applied military teaching techniques and in applied military leadership including management of military assets; introduction to leadership theory and practice and military law. Included is a physical training program and a weekend field problem. Prerequisite: Permission.

COURSES OF INSTRUCTION

1801-302—Fundamentals and Dynamics of Military Team I (S) 3 hrs. cr.

Branches of the Army, small unit tactics, communications, leadership theory and practice. Included is a physical training program and two weekend field problems. Prerequisite: Permission.

1801-411—Fundamentals and Dynamics of Military Team II (F) 3 hrs. cr.

Command and staff concept and evolution, organization for operations, the value and scope of military intelligence, the composition and mission of various military teams, broad aspects of military logistics; leadership theory and practice. Also included is a program of directed readings in Military History (History of War Seminar may be substituted), a physical training program and a weekend field problem. Prerequisite: Permission.

1801-412—Leadership and Management II(S) 3 hrs. cr.

Military law, obligations and responsibilities of an officer, military personnel, logistics and administrative management; world change and military implications; leadership theory and practice. Also included is a physical training program and two weekend field problems. Prerequisite: Permission.

1801-498—Seminar in Military Science (Demand) 1-3 hrs. cr.

A seminar for upper division cadets. The course is designed to give both broad and specialized knowledge of the discipline through the study and analysis of selected topics. Prerequisite: Advanced standing in Military Science and consent of department head.

MUSIC

Division of Arts and Sciences

Carnine, Elliott, Harrell, Harris, D. Johnson, Sims, Thelen

The department of Music offers courses leading to the degrees of Bachelor of Arts and Bachelor of Science in Education in Music.

Bachelor of Arts

The Bachelor of Arts degree requires 64 hours of music. Required courses are Music 109-210, Music 111-112, Music 181-182, Music 211-212, Music 240, Music 311-312, Music 420, Music 431, Music 444, Music 450, eight semesters of applied major, 8 hours of music electives (applied or courses), and eight semester of large ensemble.

Bachelor of Science

The Bachelor of Science in Education degree requires the following courses: Music 109-210, Music 111-112, Music 131, Music 181-182, Music 211-212, Music 240, Music 311-312, Music 332, Music 420, Music 431-432, Music 444, Music 450, and seven semesters of large ensemble. These additional courses must be completed in order to be certified for the following:

Vocal major—Music 310.

Instrumental major—Music 231, Music 232, Music 361, Music 411.

Double Certification—all five courses listed for vocal and instrumental majors, and include two semesters of large choral ensemble.

Students working toward a major in music in either degree must be enrolled in and meet departmental requirements for student recitals including attendance and recital appearance each of the semesters they are required to study their applied major (In applied music a minimum practice requirement is one hour per day for each half-hour lesson); present a senior recital; perform in a large ensemble during each semester of residency unless waived by the Head of the Music Department after minimum requirements are met. Large ensemble requirements are to be met as

MUSIC

follows: Vocal major—Choir; Wind and Percussion major—Band; String major—Orchestra; Keyboard major—any large ensemble with permission of instructor. A piano proficiency test must be completed during the Junior year before recommendation by the department for the "Professional Semester" of supervised teaching.

See page 96 for teacher education requirements.

General Education Option

1006-110—Music Appreciation (F,S)	3 hrs. cr.
Designed to give the non-music major an insight into musical masterpieces from all eras of music literature.	

Courses of Instruction Required Of All Music Majors

1004-240—Recital Attendance (F,S)	0 hrs. cr.
Attendance at afternoon and evening recitals and concerts is required of all music majors each semester. Grade is based on attendance and is averaged into the applied major grade.	
1004-450—Senior Recital	0 hrs. cr.
A solo recital is required of all music majors.	

Music Theory and Composition

1004-030—Fundamentals of Music (F)	3 hrs. cr.
Designed for the person who has had little or no background in reading musical notation, this course emphasizes the most elementary aspects of music notation. Note names and values, scales, intervals, keys and key signatures, time signatures, rhythm, and other basic concepts are thoroughly explored through such activities as writing, singing, and keyboard playing.	

1004-109—Sight-singing and Ear-training (S)	2 hrs. cr.
The basic skills and concepts needed for sight-reading, sight-singing, solfège, rhythmic dictation, melodic dictation, and harmonic dictation are introduced, studied, and applied in aural and notated musical examples.	

1004-111—Music Theory (F)	3 hrs. cr.
Study of basic fundamentals of music with initiation of harmonic analysis and part-writing. Basic course for music majors; others by consent of the instructor.	

1004-112—Music Theory (S)	3 hrs. cr.
Sequential course in written harmony, including inversions, seventh chords, and non-harmonic tones. Prerequisite: Music 111. Three meetings per week.	

1004-133—Opera and Musical Theater (F)	2 hrs. cr.
A course devoted to the history, production, and performance of one act operas, operatic excerpts, musicals and light opera. The course will have academic concentration the first six weeks on opera history and opera production with the last ten weeks focusing upon the particular musical or light opera selected for production the spring semester of that year.	

1004-135—Musical Theater and Opera (F)	2 hrs. cr.
A course devoted to the history, production, and performance of one act operas, operatic excerpts, musicals and light opera. The course will have academic concentration the first six weeks on musicals and their production with the last ten weeks focusing on the particular one act opera(s) and/or operatic excerpts selected for production the spring semester of that year.	

COURSES OF INSTRUCTION

1004-181—Choral Conducting Techniques (F)	2 hrs. cr.
Technique of baton, factors in interpretation, score reading, rehearsal procedures for choral organizations, program building, and public appearances.	
1004-182—Instrumental Conducting Techniques (S)	2 hrs. cr.
Techniques of baton, factors in interpretation, score reading, rehearsal procedures for instrumental organization, adds program building, and public appearances. Laboratory work with the college Concert Band or Orchestra.	
1004-210—Sight-singing and Ear-training (F)	2 hrs. cr.
Sequential course in using the skills and concepts in sight-singing and ear-training. Melodies of increasing difficulty will be read at sight. The ear-training emphasis will be in harmonic dictation. Prerequisite: 1004-109	
1004-211—Music Theory (F)	3 hrs. cr.
Modulation, diatonic seventh chords, altered chords, advanced part-writing procedures. Prerequisite: Music 112.	
1004-212—Music Theory (S)	3 hrs. cr.
Secondary dominant chords, augmented triads and sixth chords, advanced modulation, introduction to contemporary techniques. Prerequisite: Music 221. Three meetings per week.	
1004-310—Vocal Technics (F,S)	1hr. cr.
Class Instruction in tone production of the human voice and the correct usage of vowels and consonants for singing. Skill is developed so that each student will be able to sing individually demonstrating correct tone production. Includes vocal methods and solo materials.	
1004-411—Marching Band Techniques (F)	1hr. cr.
Study of procedures needed in organization, promotion, equipping, rehearsing and performance of a marching band. Includes study of musical repertoire and charting of field maneuvers. For music majors; others by consent of instructor. Prerequisite: 1 sem. Marching Band	
1004-420—Form and Analysis (F)	3 hrs. cr.
Harmonic and formal analysis of compositions from the Baroque Era through contemporary music. Prerequisite: Music 212.	
1004-431—Orchestration (S)	3 hrs. cr.
Capacities of orchestral instruments. Scoring for various orchestral combinations, including full orchestra. Prerequisite: Music 212.	
1004-444—Advanced Conducting Techniques (F)	2 hrs. cr.
To prepare the student to successfully handle some of the more difficult conducting skills. Includes irregular beat patterns, advance technical problems and methods developed for solving them. Prerequisite: Music 181, Music 182.	

Music History

1006-311—History of Music (F)	3 hrs. cr.
General survey of history of music from Greek period to 18th century. (Formerly 351.)	
1006-312—History of Music (S)	3 hrs. cr.
From 18th century to the present. Score reading required. (Formerly 352.)	

MUSIC

Music Education

0832-131—Introduction to Professional Music Education (demand) 1 hr. cr.
A course designed to orient the student to the profession of music education.

0832-332—Music for the Elementary School (F,S) 3 hrs. cr.
Emphasis on methods of teaching music in the elementary classroom and a study of materials to be used. (Formerly 262.)

0832-432—Music in the Public School (F) 3 hrs. cr.
A course designed to acquaint the music education major with the problems of the administration and supervision of the school music program through the high school level. The content includes the place of music in the school program, music equipment, schedules, budget, instructional problems, and public relations in music. (Formerly 371.)

Instrumental Techniques (F,S) 1 hr. cr.
1004-231 String Techniques
1004-232 Brass Techniques
1004-361 Percussion Techniques
1004-362 Woodwind Techniques
Class instruction in the orchestral and band instruments, including a study of methods and materials to be used in the teaching of a beginning student.

Music Organizations

1004-121, 321—Choir (F,S) 2 hrs. cr.
Open to all college students by audition only. Preparation and performance of great choral works. Prerequisite: permission of the instructor. Each class may be repeated three times.

1004-141, 341—Lab Band (F,S) 1 hr. cr.
A stage band open to all students who are qualified instrumentalists. The Lab Band will prepare and present several concerts during the year, while dealing primarily with music of the jazz idiom. Prerequisite: permission of the instructor. Each class may be repeated three times.

1004-151, 351—Orchestra (F,S) 2 hrs. cr.
Open to all college students who play an orchestral instrument. The orchestra will present public concerts, performing standard orchestral literature. Prerequisite: consent of instructor. Each class may be repeated three times.

1004-161, 361,—Vocal Ensemble (F,S) 1 hr. cr.
Small select ensemble from the membership of the college choir. Performs all literature from madrigal to modern music, written for small vocal ensemble. Prerequisite: membership in choir. Each class may be repeated three times.

1004-171, 371—Brass Choir (F,S) 1 hr. cr.
Open to all students with band instrument experience. Performance of literature for brass ensemble. Two meetings per week. Each class may be repeated three times.

1004-180—Choral Society (demand) no credit
Open to all college students and area adults. The purpose of this course is to offer choral experiences for all college students and adults not eligible for the choir. Concerts will be scheduled throughout the year at the discretion of the conductor.

COURSES OF INSTRUCTION

1004-191, 291, 391, 491—Marching Band (F)

2 hrs. cr.

Open to all qualified students with high school band experience. A study and practice of the fundamentals of drill and presentation of marching maneuvers and pageants at athletic events and various community events. Prerequisite: permission of instructor.

1004-192, 292, 392, 492—Concert Band (S)

2 hrs. cr.

Open to all qualified students with band instrument experience. Rehearsal and public performances based upon study and preparation of composite repertoire for this media. Prerequisite: permission of instructor.

Performance

1004-102, 202, 302, 402—Opera or Musical Theater Performance (S) 1 hr. cr.

A laboratory course devoted to the performance of musicals or operas. Performance of a role in the production along with active participation in the different areas of staging the musical or opera. Credit is applied after departmental evaluation and approval at the end of the semester. (Students may not receive credit from both the theater department and music department for the same production).

Applied Music—Private Lessons

1004-103-408 Applied Music (F,S)

1-2 hrs. cr.

Major

207-208 2 hrs. cr.

407-408 2 hrs. cr.

Brass, Keyboard, Percussion, String and Woodwind instruments, and Voice. All major applied music offerings may be repeated one time.

Elective

105-106 1 hr. cr.

305-306 1 hr. cr.

107-108 2 hrs. cr.

307-308 2 hrs. cr.

Piano Proficiency

1004-103 No Prerequisite

1004-104 Prerequisite:

1004-103 or equivalent

1004-203 Prerequisite:

1004-104 or equivalent

1004-204 Prerequisite:

1004-203 or equivalent

Provides an acquaintance with the keyboard through the development of reading skills, fundamental piano techniques, basic musicianship, and elementary repertoire. Maximum credit allowed: four units. Open to all students, but designed primarily for the music major requiring keyboard competency who has little or no piano background.

Piano Elective

1004-105: 1004-106 No Prerequisite

1004-305; 1004-306 Prerequisite: 1004-106 or equivalent

An elective course open to all students. Provides an opportunity to facilitate individual expression at the keyboard and to develop musicianship.

Piano Major

1004-207; 1004-208 Prerequisite: Ability to play in a pianistic and musical manner comparable to Piano Level IV.

1004-407; 1004-408 Prerequisite: Piano 1004-208 or equivalent and approved candidacy for BS or BA degree and recital approval.

The required courses for music students enrolled in the BS or BA programs with piano major. Under-class courses may be repeated each year for credit. Descriptions of the piano levels are available from the Music Department office.

NURSING

Division of Technology

Elgin, Jacobs, Ketchum, Schmidt, Vlasak

Missouri Southern State College offers a program leading to an Associate of Science Degree in Nursing. Satisfactory completion of the requirements for this degree qualifies the person to write the State Board of Nursing Examination for licensure as a Registered Nurse (R.N.).

Admission to Missouri Southern State College does not automatically confer admission to the nursing program. In addition to meeting admission requirements for the College, candidates who are interested in a career in nursing as a Registered Nurse (R.N.) are required to apply for admission to the Department of Nursing. The application form may be obtained from the Department of Nursing office, Kuhn Hall. Applications should be submitted prior to March 1 preceding the Fall Semester which you wish to enter. Each application is reviewed by the Admission Committee for the Department of Nursing.

In determining a candidate's eligibility for admission basic qualifications compatible with the profession of nursing are given consideration including test results, scholarship, physical, mental, emotional health and references establishing personal abilities.

Based upon the Committee's evaluation, each applicant is placed in one of three categories: 1) Approved for Admission; 2) Approval on condition that certain stated requirements are met; or 3) Advised not to pursue the program in nursing.

Tuition and fees for nursing students include those listed on page 33 for all college students. Additional expenses applicable to nursing students are:

1. School uniforms, supplies and equipment
Minimum of \$150.00
2. Graduation pin, uniform and licensing application fee
Minimum of \$75.00
3. Eight week summer session: transportation, room, and meals for off campus clinical laboratory. Costs are variable based upon individual arrangement, laboratory schedules and available housing facilities.

Pre-nursing courses to be taken the summer prior to entering the nursing program are Math 30 and Biology 121.

The Associate of Science in Nursing requires a minimum of 72 semester hours. The required courses are: Nursing 100, 110, 130, 220, and 240. Supporting science courses required include: Soc. 110, Psy. 100, Bio. 221 and 231 and Chem. 100. Courses to complete general education requirements (see page 55) should be selected with adviser approval. Nursing courses must be earned in the prescribed sequence and supporting science courses should be earned in the prescribed sequence (see suggested order of study).

Supervised clinical laboratory periods are an integral part of each nursing course. During clinical laboratory periods students give direct care to patients under the guidance of the nursing faculty. Clinical laboratory periods are conducted in a variety of community health agencies. Three major agencies include: Freeman Hospital, St. John's Medical Center, Joplin; and St. John's Hospital, Springfield, Missouri.

5208-100—Fundamentals of Nursing (F)

5 hrs. cr.

Nursing 100 provides an orientation to nursing through a brief study of nursing history, concepts of health-illness, and health care delivery. An introduction to pharmacology, communication skills, and rehabilitation is included. Components of the nursing process are presented with application of assessment and intervention in nutrition, elimination, activities of daily living and commonly prescribed therapeutic measures.

Consideration of the individual is approached through concepts of family development, emotional needs, spiritual needs, and resources in relation to health, illness, and dying. Three (3) hours lecture, four (4) hours of classroom laboratory, four (4) hours clinical laboratory including pre- and post-conferences.

COURSES OF INSTRUCTION

5208-110—Maternal and Child Health (S)

9 hrs. cr.

Maternal and child health is the study of the developing family and normal growth and development from conception through adolescence. Theory provides the basis for application of the nursing process to the mother and her significant others. Complications of childbirth and common illnesses of childhood with related drug and nutritional needs are included. Historical highlights, legislation and trends are presented.

Five (5) hours lecture, twelve hours (12) clinical laboratory. Prerequisite: Nursing 100 with a minimum grade of C.

5208-130—Psychiatric-Mental Health Nursing (Summer)

4 hrs. cr.

The course builds upon the psychosocial development concepts of previous courses. Communication skills in the therapeutic nurse-patient relationship are emphasized. The clinical laboratory provides the student with experiences in the current therapy programs in the psychiatric-mental health setting.

Four (4) hours lecture, twelve (12) hours clinical laboratory. Prerequisite: Nursing 110 with a minimum grade of C.

5208-220—Nursing in Physical Illness I (F)

9 hrs. cr.

Nursing 220 focuses upon the care of the adult who requires medical and/or surgical intervention. Emphasis is given to developmental tasks during maturity. Application of all components of the nursing process is stressed in the care of the less acute or chronically ill person. Drug therapy, and diet therapy, and rehabilitation are included in relation to common health problems.

Five (5) hours lecture, twelve (12) hours laboratory with supervision including pre- and post-conferences. Prerequisite: Nursing 130 with a minimum grade of C.

5208-240—Nursing in Physical Illness II (S)

9 hrs. cr.

Continuation of the care of the adult in more acute and critical care facilities including related drug and diet therapy. Developmental tasks during the aging period are included. This course provides orientation to the role of the graduate by presentation of legal and professional responsibilities and opportunities. With supervision, the student assumes a more active role as a member of the health team.

Four (4) hours lecture, fifteen (15) hours clinical laboratory including pre- and post-conferences with the supervised clinical experience. Prerequisite: Nursing 220 with a minimum grade of C.

OFFICE ADMINISTRATION

Division of Business Administration

Compton, Grim, Price, Turner

Look under General Business for requirements essential to earning an Associate of Science degree in Secretarial Science, the Certificate of Achievement and the Bachelor of Science in Business Education degree.

5005-101—Elementary Typewriting (F)

3 hrs. cr.

The chief emphasis in this course is to learn to manipulate the typewriter efficiently. The development of speed is stressed so that the student will, upon completion of the course, have a fair rate which will be of use to him personally. A few simple letter styles are taught as well as manuscript writing and basic tabulation.

5005-102—Intermediate Typewriting (F,S)

3 hrs. cr.

This is primarily a letter writing course. All the styles of business and personal letters are studied and written. Efficient methods of writing more difficult manuscript and tabulations are also studied. Minimum requirement for passing is the ability to type 40 words per minute for five minutes with the 5-error limit. Prerequisite: OA 101 or a good knowledge of the keyboard.

OFFICE ADMINISTRATION

5005-111—Elementary Shorthand (F)

3 hrs. cr.

A theory course in which the principles of shorthand are studied. Vocabulary building is stressed. Not open to students who have completed one year of shorthand in high school. Typewriting should precede or parallel the course. Class meets five days per week.

5005-120—Intermediate Shorthand (F,S)

3 hrs. cr.

A dictation course in which the theory has been completed. It is a review of theory, and special attention will be given to developing efficient transcription procedures. Dictation will range from 60 to 110 words per minute. The minimum speed requirement by the end of the semester is to write at least 80 words per minute with 95 per cent accuracy. Prerequisite: OA 111 or any course in which the theory has been completed.

5005-200—Advanced Typewriting (F,S)

3 hrs. cr.

Production of mailable letters, manuscripts, reports, addressing envelopes, business forms and legal typing is emphasized. Minimum passing requirement is 60 words per minute for five minutes with the 5 error limit. Prerequisite: OA 102 or the ability to type 40 words per minute and a knowledge of letter writing.

5005-210—Advanced Shorthand (F)

3 hrs. cr.

The emphasis in this course is to develop accuracy in transcription as well as to increase the rate of transcription. Dictation will range from 80 to 140 words per minute. The minimum requirement by the end of the semester is at least 90 words per minute with 95 per cent accuracy. Prerequisite: OA 120 or the ability to take dictation at 80 words per minute.

5005-220—Dictation and Transcription (S)

3 hrs. cr.

This is a course for the development of expert stenographers. A great deal of emphasis is placed upon accuracy and rate of transcription, and production of mailable letters. Dictation will range from 100 words per minute to 160 words per minute. The minimum requirement by the end of the semester is at least 120 words per minute with at least 95 per cent accuracy.

5005-230—Secretarial Procedures (S)

3 hrs. cr.

Business ethics, secretarial duties common to all lines of business, such as handling mail, meeting callers, using the telephone, etc. The student receives instruction in the use of present day filing systems and their application to the various types of business. This course is offered for sophomores in the Office Administration curriculum. Freshmen may be admitted by permission of the instructor.

0838-336—Methods of Teaching Business (F,S)

2 hrs. cr.

Special methods of instruction problems and difficulties peculiar to the teaching of each business subject; presentation of subject matter; content and arrangement of material, organization and administration. Prerequisite: Admission to the Teacher Education Program and completion of required business courses (see General Business). Two hours credit in Education.

PARALEGAL STUDIES

Division of Arts and Sciences Department of Social Sciences

Description of Courses

1499-301 Introduction to Legal Assistance (F)

3 hrs. cr.

An introduction to the legal system with particular emphasis on the role of the paralegal in the system; a study of the ethics of the profession; an analysis and dis-

COURSES OF INSTRUCTION

cussion of "Why the law?"; how the law develops and works; the court system; the major supreme court decisions; due process of law; the Constitution and Bill of Rights as they apply in specific cases; and the skills of the paralegal as they fit into the structure of our legal system.

0506-301—Business Law (F,S) 3 hrs. cr.

A study of the principles of law and its enforcement as applied to American Business. The course includes the study of contracts, agency and employment, negotiable instruments, personal property, bailments, and sales of goods. Special attention is placed on law terminology and cases and problems are used to illustrate the various aspects of business law.

0506-302—Business Law (F,S) 3 hrs. cr.

Relates to partnerships, corporations, real property and leases, insurance security devices, bankruptcy, trusts and estates, and government regulations. Cases and problems are used extensively. Prerequisites: Junior standing or consent of the instructor. 301 should precede 302.

1499-302—Legal Research (F, Even, S, Even) 3 hrs. cr.

An introduction to the type of research involved in case preparation; use of the law library and the various digests, encyclopedias, practice manuals, etc., contained therein.

1499-311—Property (S,Odd) 3 hrs. cr.

The procedures and forms utilized in real estate transactions and conveyances and the procedures and forms governing ownership and transfer of personal property.

1499-312—Civil Litigation (S,Odd) 3 hrs. cr.

The daily practice of the attorney including the choice of legal forms; filing of civil actions; motions before, during, and after trial; appellate practice; and the application of the law relating thereto.

2207-350—Criminal Law (S) 3 hrs. cr.

A study of the origins, development, application, and enforcement of criminal laws, their purposes and functions, and the rights and duties of public officials and citizens in relation to local, state and federal laws. The course is interdisciplinary in nature bringing together law enforcement students and political scientists in attempting to achieve a common understanding of crimes and punishment. The casebook method is used and students taking the course for upper level credit must complete additional research in the field of criminal law as required by the instructor. Prerequisite: Political Science 120.

1499-401—Wills, Trusts, and Probate (F,Odd) 3 hrs. cr.

A study of the more common forms of wills and trusts, and a survey of the fundamental principles of law applicable to each; a study of the organization and jurisdiction of a Missouri Probate Court; a detailed analysis of the administration of estates in Missouri Probate; review of estate and inheritance taxes applicable to such estates.

2207-432—Constitutional Law (S,Odd) 3 hrs. cr.

Development of the Government of the United States through judicial interpretation of the Constitution. Prerequisite: Political Science 120.

1499-491—Internship (S, Even) 3 hrs. cr.

An applied internship of 135 hours done under the direct supervision of a practicing professional who is directly engaged in day-to-day application of the law (i.e., judges, attorneys, government officials), as approved by the department head and the division dean.

PARALEGAL STUDIES

1499-498 Senior Seminar (S,Even)

3 hrs. cr.

Review and comprehensive examination of entire program: Guest lecturers about employment opportunities by outstanding members of the legal profession; and provide dialogue between students' prospective employers.

PHILOSOPHY

Division of Arts and Sciences Department of Language and Literature

McCormick

1509-201—Introduction to Philosophy (F)

3 hrs. cr.

Comparative survey of major types of philosophy, and of representative problems in philosophy.

1509-212—Ethics (S)

3 hrs. cr.

Exploration of the problem of value, personal moral attitudes and standards, comparative survey of major ethical systems, and evaluation of the chief ethical struggles in contemporary society.

HEALTH, PHYSICAL EDUCATION AND RECREATION

Division of Education and Psychology

Albins, Beard, Calwhite, Ellis, Frazier, Gaddis, Landrith
Oldham, Turner, Willoughby, Yount, Williams

Students who desire certification as a teacher of physical education may choose to become qualified at either the elementary level, the secondary level, or a combination of both elementary and secondary levels. Students planning to major in this field should refer to page 96 of this catalog where the Teacher Education Program is described. Students planning to teach at both elementary and secondary levels should select the K-12 plan. Those desiring to make physical education one of two teaching fields should prepare under either the K-8 plan or the 7-12 plan. The second teaching field must be selected from: art, biology, business education, chemistry, English, mathematics, physics, physical science, Spanish, or speech. The student will consult the specific department concerned for the requirements of the second teaching field.

PHYSICAL EDUCATION

A major for the Bachelor of Science in Education degree with one teaching field (K-12 plan) consists of 52 semester hours. The required courses are: Bio 221, HPER 251, HPER 252, HPER 310, HPER 312, HPER 321, HPER 332, HPER 335, HPER 340, HPER 342, HPER 350, HPER 351 (Men), HPER 352 (Women), HPER 365, HPER 370, HPER 431, HPER 450, HPER 470, Educ 338, Psy 412. (A course in child psychology (Psy 300) or human development (Psy 110) is required for teachers of elementary school physical education.)

A major for the Bachelor of Science in Education degree with elementary physical education as one of two teaching fields (K-8 plan) consists of 35 semester hours. The required courses are: Bio 221, HPER 310, HPER 312, HPER 321, HPER 332, HPER 335, HPER 340, HPER 342, HPER 365, HPER 370, HPER 431, Educ 338, and Psy 412.

A major for the Bachelor of Science in Education degree with secondary physical education as one of two teaching fields (7-12 plan) consists of 37 semester hours. The required courses are: Bio 221, HPER 251, HPER 252, HPER 321 (Women), HPER 335, HPER 342, HPER 350, HPER 351 (Men), HPER 352 or 360 (Men), HPER 365, HPER 431, HPER 450, HPER 470, Educ 338, and Psy 412.

COURSES OF INSTRUCTION

0835-101—Introduction To Physical Activities (F,S) 2 hrs. cr.

The course is a combination of physical activities and lectures; two individual or dual activities are offered to provide the student with the opportunity to develop a degree of skill sufficient to participate during leisure time and the lectures acquaint students with basic knowledge, understandings and values of physical activity as it relates to optional healthful living. This course is necessary for the general education requirement in physical education.

0837-160—Personal Health (F,S) 2 hrs. cr.

Study of health problems of the individual, body mechanics, nutrition, drugs and drug abuse, sex hygiene, mental hygiene, and the cause and prevention of common diseases. Not recommended for elementary education majors.

0835-251—Fundamentals of Physical Education Activities I (F) 4 hrs. cr.

Study of the skills and understandings of selected activities: games, sports, and individual activities commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness. The course is generally team taught by physical education faculty; meets for two periods daily. (Either HPER 251 or 252 may be replaced with 5 semester hours of different activity courses, with permission of department head) Enrollment restricted to P.E. majors. Prerequisite: 30 hours.

0835-252—Fundamentals of Physical Activities II (S) 4 hrs. cr.

Study of the skills and understandings of selected activities: sports, gymnastics, tumbling, and rhythms commonly found in the school program. Students are required to demonstrate minimum levels of proficiency in the various activities. A student may be required to enroll in an activity course in any area of weakness. The course is generally team taught by physical education faculty; meets for two periods daily. Enrollment restricted to P.E. majors. Prerequisite: 30 hours.

0835-310—The Elementary School Physical Education Program (F) 3 hrs. cr.

A course designed to familiarize the student with the procedures and techniques for planning the curriculum for elementary school physical education. (P.E. majors only.)

0835-311—Physical Education for the Elementary School (F,S) 2 hrs. cr.

Study of the methods and materials needed in directing the activity programs of games, skills, rhythm, and stunts for the elementary school child. Designed for men and women who are candidates for the elementary level teaching certificates.

0835-312—Teaching Elementary School Physical Education (S) 3 hrs. cr.

Analysis of basic movement patterns, basic skills, rhythmic and game activities with detailed explanations of presentation to the elementary school child. Prerequisites: HPER 310 (P.E. majors only.)

0835-321—Theory and Analysis of Selected Team Sports (F,S) 3 hrs. cr.

A professional course designed for physical education teachers with emphasis on organizing and performing of selected team sports. Prerequisite: HPER 252.

0835-332—Rhythmic Form and Analysis (F) 2 hrs. cr.

Analysis of dance forms showing how complex music and dance forms are evolved. Prerequisite: HPER 252.

0835-335—History and Philosophy of Physical Education (S) 2 hrs. cr.

A study of the changing role of physical education as indicated by its historical past and as evidenced through the influence of the various philosophies. Prerequisite: HPER 252 or currently enrolled in 252.

HEALTH, PHYSICAL EDUCATION AND RECREATION

0835-340—Motor Learning in Physical Education (F,S) 3 hrs. cr.

Study of motor learning to provide the teacher with the background necessary for identification of physical, mental, social, and emotional development of children and their effect on behavior and movement. Recommended for teachers working with children with special problems. Prerequisite: HPER 310 or 311.

0835-342—Kinesiological Approach to Movement (S) 3 hrs. cr.

A mechanical and kinesiological approach to the movement of individuals in various activities. Prerequisite: Bio 221 or equivalent.

0835-350—Theory of Basketball (S) 2 hrs. cr.

Organization and management of the secondary school basketball program. Systems of offense and defense in basketball. Study of rules, training schedule, discussion of problems arising during training and regular playing season. Prerequisite: HPER 252.

0835-351—Theory of Football (F) 2 hrs. cr.

Attention to team play, systems of offense and defense, field strategy, discussion of rules, training and equipment. Prerequisite: HPER 252.

0835-352—Theory of Track and Field (S) 2 hrs. cr.

Organization and administration of meets, coaching, physical conditioning and training for each event in track and field programs. Prerequisite: HPER 252.

0835-360—Theory of Baseball (S) 2 hrs. cr.

Organization and management of a school baseball program to individual techniques, team play and problems in coaching of baseball. Prerequisite: HPER 252.

0835-365—Socio-Psychological Aspects of Athletics (F,S) 2 hrs. cr.

Behavior exhibited in the learning of skills and physical performance related to sociological and psychological concepts connected with the demands of physical activities. Group and individual activities and conflicts in sport are analyzed; the effect of sport on society is also studied. Prerequisite: HPER 252.

0837-370—School Health Education (F,S) 3 hrs. cr.

Study of the content, facilities, and equipment needed for teaching school health and safety. Should be taken by all elementary education majors in place of HPER 160. Separate sections with emphasis on Health and Nutrition Programs for children are taught for elementary majors. Prerequisite: 5 hours Biology.

0835-410—Rules and Officiating of Team Sports (F,S Even) 3 hrs. cr.

Knowledge and skills for officiating basketball, volleyball, softball, baseball, and football; officiating laboratory required in some areas. Prerequisite: HPER 252.

0835-431—Physiology of Exercise (F,S) 2 hrs. cr.

The course in this area is based upon the student already having prerequisite knowledge of human physiology. An emphasis is placed on human responses to varying levels of physiological conditioning and the environment within which the exercise is taken. Specifically, the course includes physiological principles to better understand human physiology under exercise stress. Prerequisite: Bio 221.

0835-450—Prevention and Care of Injuries (F) 3 hrs. cr.

A course designed to provide knowledge to the student related to preventing, care, and rehabilitation of injuries. Laboratory experiences are included. Prerequisite: HPER 342.

COURSES OF INSTRUCTION

0835-470—Administration of Physical Education (F,S) 2 hrs. cr.

Organization and management of health and physical education in schools, scheduling, personnel, curriculum, finances, equipment and facilities. The intramural program is also studied. Prerequisite: 20 hours HPER

0835-498—Seminar in Health or Physical Education (demand) 1-3 hrs. cr.

A thorough study of an advanced problem in health or physical education for selected students. Prerequisite: Senior standing, permission of department head.

0835-499—Independent Study 1-3 hrs. cr.

Research of a problem or field study relating to physical education; material, content, credit and schedule to be arranged by the department head. Prerequisite: Senior standing, 3.0 grade point average in major, and permission of department head.

DRIVER EDUCATION

To meet the Missouri teacher certification requirements as a driver education instructor, the following courses are required: HPER 220, HPER 230, HPER 361, HPER 362, Psy 110 or Psy 301. Elective courses must include 6-8 semester hours from the following: LE 100, Auto 150, Psy 221, Educ 370, and Soc 352. The minimum total semester hours required for certification is 21.

0836-220—First Aid (F,S) 2 hrs. cr.

Designed to complete the standard course of the American Red Cross in First Aid.

0836-230—Safety (F) 2 hrs. cr.

A course aimed at developing concepts which are basic to safety education and for preparing the student to assume responsibility for accident prevention in the school, home, and community.

0836-361—Introduction to Driver Education (F) 3 hrs. cr.

The first of two courses designed to prepare teachers of driver education for secondary schools. The place of the motor vehicle in American life; traffic safety; instructional materials and recommended methods of presenting such materials in the classroom and in the car on the road. Prerequisites: Psy 301 or Psy 110. Student must have: (1) a valid driver's license and (2) a safe driving record.

0836-362—Advanced Driver and Traffic Safety (S) 3 hrs. cr.

A continuation of 361 with special attention given to administration, organization, finance, adult education, research, and evaluation of the school driver education program. Traffic safety problems at the local, state and national levels are also considered. Laboratory required. Prerequisite: HPER 361.

RECREATION

0837-390—Introduction to Recreation (S) 3 hrs. cr.

A study of the recreation movement in America with a special insight into the development of community recreation departments and programs.

0837-391—Recreational Leadership (demand) 3 hrs. cr.

A study of the qualities which make for effective leadership and a look at the role of the recreation leader. Prerequisite: HPER 390.

HEALTH EDUCATION CERTIFICATION

To meet the certification requirements as a health education instructor (grades 7-12), the following courses are required: Soc 121, HPER 160, Bio 221, Psy 221, HPER 370, Chem 100 or Bio 211, and DH 310.

HEALTH, PHYSICAL EDUCATION AND RECREATION

COACHING CERTIFICATE*

The coaching certificate has been established to provide an opportunity for students other than physical education majors to become certified coaches in the State of Missouri. To earn the certificate the student should have a background in athletics and complete a total of 15 semester hours plus any prerequisite. The required courses are as follows: HPER 342, HPER 410, HPER 450. Select 6 hours from: HPER 350, HPER 351, HPER 352, HPER 360.

THE ACTIVITY PROGRAM IN PHYSICAL EDUCATION

The activity program in physical education has two basic objectives. It has the purpose of offering a program that will provide the student with the opportunity to develop a degree of skill sufficient to create interest and participation in this activity during leisure time in the adult years. A second important purpose is to provide the student with the necessary knowledge of philosophical, psychological, physiological and sociological nature of physical activity to comprehend the necessity of continued physical health throughout his lifetime.

To insure exposure to the various recreational activities, the College has adopted the following requirements:

All men and women (except physical education majors) must enroll in HPER 101. Students are required to complete two additional hours; this may be done by choosing two activity courses or HPER 160.

Varsity athletes should also enroll in the sport of their choice which will replace any activity course requirement except HPER 101.

A uniform prescribed by the division is to be furnished by each student and is a course requirement.

*This certificate does not permit the individual to teach physical education.

ACTIVITY COURSES

Course No.		Hours Cr.
0835-100	Individual Physical Education (Therapeutic) (F)	2
0835-101	Introduction to Physical Activities I (F,S)	2
0835-161	Varsity Football (F)	1
0835-162	Varsity Basketball (F)	1
0835-171	Varsity Cross Country (F)	1
0835-172	Varsity Track and Field (S)	1
0835-180	Varsity Golf (S)	1
0835-182	Varsity Baseball (S)	1
0835-192	Varsity Tennis (S)	1
0835-210	Golf and Badminton (F,S)	1
0835-222	Varsity Sports and Activities (F,S)	1
0835-231	Elementary Gymnastics and Tumbling (F, Odd)	1
0835-232	Intermediate Gymnastics (S, Even)	1
0835-240	Fencing and Tennis (F)	1
0835-241	Soccer, or Speedball and Basketball (F, Even)	1
0835-242	Volleyball and Tennis (S, Odd)	1
0835-250	Social Dance (S)	1
0835-261	Elementary Swimming (S, Odd)	1
0835-270	Advanced Swimming (Senior Life Saving) (S, Even)	1
0835-281	Elementary Modern Dance (F, Even)	1
0835-282	Intermediate Modern Dance (S, Odd)	1
0835-290	Recreational Activities (S, Even)	1
0835-292	Track, Weight Training (F,S)	1

PHYSICS

Division of Arts and Sciences

Phillips, Sloan, Strobel

A major for the Bachelor of Science degree in Physics consists of 36 semester hours in physics plus 18 additional hours in mathematics. The required courses are: Phys. 250, Phys. 260, Phys. 301, Phys. 322, Phys. 341, Phys. 372, Phys. 381, Phys. 401, Phys. 452 or Phys. 480, Phys. 498, Math 150, Math 250, Math 260, and Math 322. The following courses are recommended but not required: Chem. 101, Chem. 102, Comp. 120, Comp. 230, Comp. 240, Math 351, Math 412, Math 431, and Phys. 480. Students who plan to seek an advance degree in engineering should plan a minimum of one year at a major university for a masters degree and two years for both the bachelor and master degrees in engineering. See suggested order of study in physics for engineering guidelines.

A major for the Bachelor of Science in Education degree with physics as a single teaching field (Plan B) consists of 25 semester hours of physics plus 15 additional hours in mathematics. The required courses are: Phys. 250, Phys. 260, Phys. 301, Phys. 322, Phys. 381, Phys. 498, Math 150, Math 250 and Math 260. Four upper division additional elective hours in physics are also required. The following courses are recommended but not required: Chem. 101, Chem. 102, Comp. 120, Geol. 110 and Phys. 372.

A major for the Bachelor of Science in Education degree with physics as one of two teaching fields (Plan A) consists of 21 semester hours of physics plus 15 additional hours in mathematics. The required courses are: Phys. 250, Phys. 260, Phys. 301, Phys. 322, Phys. 381, Phys. 498, Math 150, Math 250 and Math 260. The following courses are recommended but not required: Chem. 101, Chem. 102, Comp. 120, Phys. 372 and Geol. 110.

Physical Science

A major for the Bachelor of Science in Education degree with a double teaching field in physics and chemistry consists of 21 hours of chemistry and 21 hours of physics, 5 hours of Geology, plus mathematics through Math 260. The required courses are: Phys. 250, Phys. 260, Phys. 301, Phys. 381, Phys. 498, Chem. 101, Chem. 102, Chem. 162, Chem. 201, Chem. 301, Geol. 110, Math 150, Math 250, Math 260, plus 3 hours of upper division electives in physics. See page 96 for teacher education requirements.

1901-100—Fundamentals of Physical Science (F,S)

5 hrs. cr.

Basic concepts in the field of physics, chemistry, geology, and astronomy. Emphasis on such environmental topics as energy reserves, chemical and thermal pollution, transportation nets, fossil and nuclear power generation, and population. Lecture and demonstration periods. Prerequisite: Math 30 with a minimum grade of C or qualified for Math 110 on the MMPT.

1902-151—Elementary College Physics I (F)

5 hrs. cr.

Study of mechanics, properties of matter, heat, wave motion, sound, electrical circuits, and radioactivity. Four hours of lecture and one 2-hour laboratory per week. Prerequisites: Math 140 or Math 130 and permission of the instructor.

1902-152—Elementary College Physics II (S)

3 hrs. cr.

Magnetism, optics, relativity, nuclear reactions and further study of mechanics including rotational dynamics. Two hours of lecture and one 2-hour laboratory per week. Prerequisite: Phys. 151.

1902-250—General Physics I (F,S)

5 hrs. cr.

Includes the study of mechanics, properties of matter, wave motion and sound. The conservation laws of physics are emphasized. Four hours of lecture and one three-hour laboratory per week. Corequisite: Math 150.

PHYSICS

1902-260—General Physics I (F,S)

5 hrs. cr.

A study of electricity, magnetism, heat, and optics, with introductions to quantum properties of radiation and matter. Four hours of lecture and one three-hour laboratory per week. Prerequisite: Phys. 250. Corequisite: Math 250.

1911-300—Astronomy (demand)

3 hrs. cr.

Solar system, gravitation, Kepler's laws, celestial coordinate systems, telescopes and optical systems, stellar evolution, nebula, galactic structure, and cosmology. Two hours lecture and one two-hour lab a week. Prerequisites: Physics 100 or equivalent and one year of high school algebra.

1902-301—Modern Physics (F)

4 hrs. cr.

Wave motion, special theory of relativity, wave-particle experiments, introductory quantum mechanics, and nuclear physics. Prerequisite: Physics 260. Corequisite: Math 260.

1902-312—Statics (S)

3 hrs. cr.

The principles of mechanics as applied to problems of engineering in which the structures under consideration are in static equilibrium. Three lectures per week. Prerequisite: Phys. 250. Corequisite: Math 260.

1902-322—Classical Mechanics (S, Odd)

3 hrs. cr.

Kinematics and dynamics of particles and systems of particles including the harmonic oscillator, potential functions, conservative fields of force, central force motion, energy, gravitation, rigid bodies and an introduction to the mechanics of continuous media. Three hours of lecture per week. Prerequisite: Phys. 260. Corequisite: Math 322 or permission of instructor.

1902-341—Thermal Physics (S, Even)

4 hrs. cr.

Temperature, transfer of heat, laws of thermodynamics, entropy, enthalpy, reversibility and irreversibility, thermal properties of materials, low temperature physics, change of phase, kinetic theory, and statistical mechanics. Four hours of lecture per week. Prerequisites: Math 260 and Phys. 260.

1902-372—Electronic Circuits (S)

4 hrs. cr.

Circuit analysis, resonance, tube and transistor characteristics, power supplies, amplifiers, and oscillators. Two three-hour lectures and lab per week. Presently limited to 15 students by equipment considerations. Prerequisite: Phys. 260. Corequisite: Math 260.

1902-381—Intermediate Physics Laboratory (F, Even)

3 hrs. cr.

Experiments in classical and modern physics, including wave phenomena, heat transfer, electrical measurements, optics, photo-electric effect and radioactivity. Two 3 hour laboratories per week. Prerequisite: Phys. 301 or permission of instructor.

1902-401—Electricity and Magnetism (F, Odd)

4 hrs. cr.

Includes study of electrostatic forces, electric fields, electric potential, properties of conductors and dielectrics, magnetic fields, magnetic properties of matter, induced electromotive force, electric circuits, Maxwell's equations and electromagnetic waves. Four hours of lecture per week. Prerequisites: Math 260 and Phys. 260.

1902-452—Quantum Mechanics (demand)

3 hrs. cr.

Time independent Schroedinger equation, eigenfunctions, expectation values, differential operators, perturbation theory, multi-electron atoms and applications to solid state physics. Three hours of lecture per week. Prerequisite: Phys. 301 and Math 322.

COURSES OF INSTRUCTION

1902-480—Selected Topics in Physics and Engineering (demand) 3 hrs. cr.

Students may select one or more of the following topics for further study: Solid State Physics, Optics, Nuclear Physics, Advanced Mechanics, Circuit Analysis, and Fluid Mechanics and Heat Transfer.

1902-498—Seminar (F,S)

1-3 hrs. cr.

Topics of current interest elected by the student from the areas of physics and engineering. Secondary education majors will be required to present several lecture-demonstration programs illustrating the basic concepts in physics at the secondary level. Open to student having a minimum of 18 hours of physics and permission of the instructor.

1902-499—Independent Study (F,S)

1-3 hrs. cr. each time elected

An independent study course structured by the adviser with approval of the department head. Prerequisite: Advanced standing with a grade point average of 3.0 in the major field. Registration in the course must be approved by adviser and the department head.

POLITICAL SCIENCE

Division of Arts and Sciences Department of Social Sciences

Minkler, St. Clair, Vollmer, Youst

Students who plan to do graduate study after completing the baccalaureate degree and/or who plan to enter government or community service will want to take the Bachelor of Arts degree. A political science major for this degree consists of 30 semester hours in Political Science. The student will select these courses in consultation with his adviser.

A political science minor consists of 20 semester hours in Political Science. For the minor the student will also select these courses in consultation with his adviser.

A social science major for the Bachelor of Science in Education degree, with an emphasis in Political Science (Plan B) consists of 47 semester hours. The requirements are: Hist. 110, Hist 120, Hist. 200, Hist. 205 or 210, 6 hours of upper division History courses, 3 hours of European and 3 hours of U. S. History, PSc 120. For the remaining 26 hours the student will take Econ. 201, 6 hours of Geography, 3 hours of Sociology and 9 hours in upper division Political Science courses. See page 96 for teacher requirements.

2207-120—Government: National, State, Local (F,S) 3 hrs. cr.

A study of the National, State and Local governments in the United States, including the state of Missouri.

2207-300—Introduction to Political Science Methods (On Demand) 3 hrs. cr.

A study of the discipline of Political Science which deals with the foundation, organization, development and principles of political science.

2207-301—Political Parties and Elections (F,Even) 3 hrs. cr.

A study of the origins, structure, and functions of political parties; the dynamics of the two-party system and the role of third parties. It also analyzes the election process. Prerequisite: Political Science 120.

2207-302—Public Opinion and Pressure Groups (S,Odd) 3 hrs. cr.

The study of the nature of pressure and interest groups and their role in the formulation of public opinion and governmental policy. Prerequisite: Political Science 120.

POLITICAL SCIENCE

- 2207-310—Law, Society, and Citizenship (On demand)** 2 hrs. cr.
A study of the American legal system with special attention given to judicial interpretation of basic constitutional rights and liberties.
- 2207-311—The American Presidency (F,Odd)** 3 hrs. cr.
The politics of presidential selection, the powers of the President, the organization of the executive branch and its relations with other organs of government. Prerequisite: Political Science 120.
- 2207-312—The Legislative Process (S,Even)** 3 hrs. cr.
An introduction to the legislative process; problems of representation, organization of the legislature, participation, and proposals for improved organization. Emphasis is placed on legislatures at the national level. Prerequisite: Political Science 120.
- 2207-320—State Government (On demand)** 3 hrs. cr.
A study of the general structure, theories, operation, and problems of state government, with special emphasis on the government of Missouri. Prerequisite: PSc 120.
- 2207-321—International Relations (F,Even)** 3 hrs. cr.
A study of the present-day relations and problems among the states of the world and the major factors which underline and influence these relations. Prerequisite: Political Science 120.
- 2207-322—International Law (S,Odd)** 3 hrs. cr.
A study of the rules and principles accepted by the members of the community of nations as defining their rights and duties and the procedure employed in protecting their rights and performing their duties. Prerequisite: 6 hrs. in political science, preferably including Political Science 321, or permission of instructor.
- 2207-331—Comparative Government (F,Odd)** 3 hrs. cr.
A study of the governments of selected European countries with special attention given to development of their political systems both in theory and practice. A comparison with American governmental institutions is emphasized. Prerequisite: Political Science 120 or 231.
- 2207-332—Non-European Comparative Government (S,Even)** 3 hrs. cr.
A study of the governments of selected non-European countries with special attention given to the development of their political systems both in theory and practice. Prerequisite: 6 hours in political science, preferably including Pol. Sci. 331, or permission of the instructor.
- 2207-342—Municipal Government (On demand)** 3 hrs. cr.
A study of the structure, legal status, functions and organization of municipal governments in America. Prerequisite: 6 hours in Political Science.
- 2207-350—Criminal Law (S)** 3 hrs. cr.
A study of the origins, development, application, and enforcement of criminal laws, their purposes and functions, and the rights and duties of public officials and citizens in relation to local, state and federal laws. The course is interdisciplinary in nature bringing together law enforcement students and political scientists in attempting to achieve a common understanding of crimes and punishment. The casebook method is used and students taking the course for upper level credit must complete additional research in the field of criminal law as required by the instructor. Prerequisite: Political Science 120.

COURSES OF INSTRUCTION

2207-411—Political Theory (F,Odd) 3 hrs. cr.

A survey of selected Western Political philosophies from early recorded history through the present time. Prerequisite: 6 hours in Political Science.

2207-412—Contemporary Political Thought (S,Even) 3 hrs. cr.

An examination of political ideas during the twentieth century. Prerequisite: 6 hours in Political Science.

2207-421—Public Administration (On demand) 3 hrs. cr.

A study of the nature, scope, and development of the American administrative system, the theory of organization, staff and auxiliary agencies, the chief executive, administrative relationships, and science in administration. Prerequisite: 6 hours in Political Science.

2207-431—Constitutional Law I (F,Even) 3 hrs. cr.

A study of constitutional principles related especially to the area of civil rights and liberties. Attention will be given to a study of the structure and functions of the American court system and its relationship to the overall governmental process.

2207-432—Constitutional Law II (S,Odd) 3 hrs. cr.

A study of constitutional principles related especially to the area of due process and equal protection of the law. Attention will be given to judicial behavior and the role of federal courts in the policy making process.

2207-450—English Constitutional History 3 hrs. cr.
(See History 450)

2207-420—United States Constitutional History 3 hrs. cr.
(See History 420)

2207-498—Seminar in Political Science (demand) 3 hrs. cr.

A study of analytical reports, research and discussions, designed to give a broad knowledge of the discipline and methods of Political Science. Prerequisite: 9 hours upper division Political Science and senior standing.

2207-499—Independent Study (F,S) 1-3 hrs. cr.

An independent study course structured by the adviser with the approval of the department head and division dean. Prerequisite: Advanced standing in the major field with a grade point average of three or better. Registration must be approved by the department head and division dean.

PSYCHOLOGY

Division of Education and Psychology

Babbitt, Banks, Combs, Junkins, Paige, Starkey, Volskay

The Department of Psychology offers three degrees: Bachelor of Arts (AB), Bachelor of Science (BS), and Bachelor of Science in Education with a major in Psychology-Special Education (BSE). See specifics below and suggested order of study section at back of Catalog.

Bachelor of Arts Degree

The major for the Bachelor of Arts degree consists of 32 semester hours and must include: Psy. 110 or 100 and 300, 311, 312, 411, 442, 451 and 452. A supporting area of 21 hours is also required and may be selected from any one of: Economics/Finance,

PSYCHOLOGY

English/Literature, History, Journalism, Law Enforcement, Marketing/Management, Military Science, Political Science, or Sociology. Other supporting areas may be selected, but must be approved by an adviser and the department.

Psychology as a minor or area of concentration as support to another major requires 21 semester hours and must include: Psy. 110 or 100 and 300, 311, 312, and 411 or 442.

Bachelor of Science Degree

The major for the Bachelor of Science Degree consists of 32 semester hours and must include: Psy. 110 or 100 and 300, 311, 312, 411, 442, 451, and 452. A supporting area of 21 semester hours is also required and may be selected from any one of: Biology, Chemistry, Computer Science, Mathematics or Physics. Other supporting areas may be selected, but must be approved by an adviser and the department.

Bachelor of Science in Education with a Major in Psychology-Special Education

Students who plan to teach special education (K-12) and/or Psychology (Secondary) should pursue the BSE with a major in Psychology-Special Education. Satisfactory completion of the degree requirements entitles the graduate to Missouri State Department of Education teaching certificates in Psychology and three areas of Special Education (Educable Mentally Retarded, Learning Disabled, and Emotionally Disturbed).

All students must make application to admission to the Teacher Education Program as explained in the Education section of this catalog. In addition to the General Education Requirements for all baccalaureate degree candidates, specific requirements for the BSE in Psychology-Special Education fall into three areas (1) 25 hours of Psychology: Psy. 302, 310, 311, 312, 382, 442, 432 and 451; (2) 36 hours of professional education in Special Methods: Educ. 330, 331, 312, 324, 340, 403, 404, 405, 420, 421, 430 or Speech 492, Educ. 470 and 474; (3) 17 hours during the professional semester: Psy. 412, Educ. 370, 402, 407, 432 and 444.

2001-100—General Psychology (F,S)

3 hrs. cr.

An introductory course, stressing the importance of the psychological mechanisms underlying all human behavior. This course satisfies the General Education Requirement; however, Education and Psychology majors should substitute Psy. 110.

2009-110—Psychology of Human Development (F,S)

5 hrs. cr.

An intensive study of the science of psychology; genetic, physiological, intellectual, social, and personality principles and concepts as they affect child and adolescent development and behavior. A ten-clock-hour observation is required. This course fulfills the General Education Requirement, but is primarily designed for Education and Psychology majors.

2001-120—Freshman Orientation (F,S)

1 hr. cr.

This course is designed to help the student become adjusted to the college environment. Beginning with personal adjustment and rules and regulations, the course broadens its scope to vocational orientation. It culminates with the advising and enrolling of the student in classes for the next semester. No credit toward psychology major.

2001-221—Psychology of Personal Adjustment (F)

3 hrs. cr.

A study of selected principles of adjustment in psychology, therapeutic approaches to improving adjustment, and research being conducted in the area. The goal is to enable the student to be more assertive and personally satisfied.

COURSES OF INSTRUCTION

2009-300—Child Psychology (F,S)

3 hrs. cr.

Behavior and growth patterns of children from conception to puberty are studied. Psychological findings are presented which are relevant to how children learn, solve problems, and function in home and school environments. Prerequisite: Psyc. 100.

2009-301—Adolescent Psychology (F,S)

3 hrs. cr.

A study of the development of the attitudes, interests, problems, and adjustment of the adolescent. A foundation for the proper evaluation of adolescent behavior. Prerequisite: Psy. 100.

0808-302—The Exceptional Child (F,S)

2 hrs. cr.

A series of awareness experiences which deal with the added complexities an exceptional child presents to a regular classroom teacher. Includes characteristics of the exceptional child, resources in the community, and legislation which determines school policy. Prerequisite: Psy. 110 or Psy. 300 or Psy. 301.

0822-310—Educational Psychology (F,S)

3 hrs. cr.

Study of the psychological problems involved in education and the practical application of psychological principles of teaching. Special emphasis placed on measurement, the nature of learning, and the environmental influences of behavior. Prerequisite: Psy. 110; or Psy. 300 or Psy. 301.

2007-311—Applied Statistics for the Behavioral and Natural Sciences (F,S)3 hrs. cr.

An introductory course which includes both descriptive and inferential techniques. Emphasis is placed on the analysis and interpretation of data. Prerequisite: Psy. 100 or Psy. 110 and Math 110, 130, or 131.

2002-312—Experimental Psychology (F,S)

5 hrs. cr.

This course introduces the student to the research process as a foundation for knowledge in the field of psychology. It is a laboratory course that stresses the acquisition of basic skills in conceiving and carrying out research, as well as analyzing results and writing reports in a professionally acceptable manner. Prerequisite: Psy. 311

2005-341—Social Psychology (F)

3 hrs. cr.

Study of the social behavior of the individual, interests and tendencies that grow out of the community life in terms of inter-group and inter-personal relationships. Prerequisite: Psy. 311.

2001-382—Introduction to Behavior Management (S)

3 hrs. cr.

An introductory course in the techniques of modifying human behavior through principles developed by learning psychology. Emphasis is placed on the design and implementation of the behavioral strategy in the laboratory as well as practical settings. Prerequisite: Psy. 110 or Psy. 100.

2002-411—Psychology of Sensation and Perception (S)

3 hrs. cr.

The nature of perception is explored through an examination of the action of the various sensory systems, such as vision and audition. It is strongly recommended that students complete at least one course in Biology prior to enrollment. Prerequisite: Psyc. 312.

0825-412—Measurement and Evaluation in Education and Psychology (F,S)

2-3 hrs. cr.

A study of test construction and item analysis. Practice in evaluating and selecting tests, in administering and scoring, and in the analysis and presentation of test results. Prerequisite: Psy. 310 or Psy. 311. (Offered in the professional semester for 2 hrs. only.)

PSYCHOLOGY

2003-422—Theories of Personality (S)

3 hrs. cr.

This course is to present an organized summary of the major contemporary theories of personality. Relevant validation research and over-all evaluation of the application of each theory will be considered. Prerequisite: Psy. 100 or Psy. 110, and consent of instructor.

2001-432—Abnormal Psychology (S)

3 hrs. cr.

Emphasizes the recognition and classification of the systems of mental disorders, specifying causes and possible therapeutic techniques. Extensive use of the American Psychiatric Association's "Diagnostic and Statistical Manual" of Mental Disorders. Prerequisite: 7 hours of Psychology or permission of the instructor.

2010-442—Physiological Psychology (F)

3 hrs. cr.

The study of brain function and brain-behavior relations with overviews of neuroanatomy, neurochemistry, nerve membrane potential, electrical and chemical aspects of synaptic transmission, sensory and motor aspects of brain function, and the interpretive aspects of brain function in relation to behavior. Prerequisite: Psy. 100 or Psy. 110. At least one course in Biology is strongly recommended.

0822-451—Psychology of Learning (F)

3 hrs. cr.

Designed to acquaint the student with the major issues and current research findings in the area of learning and memory. General topics include transfer of training, attention, memory system approaches as well as other selected topics. Prerequisite: Psy. 312.

2001-452—History and Systems of Psychology (S)

3 hrs. cr.

A study of the various systems of psychology based on historical antecedents and their effects on contemporary scientific psychology. Prerequisite: Psy. 311, or consent of instructor.

2006-471—Individual Testing (F)

3 hrs. cr.

Practice in the administration and interpretation of individually administered intelligence tests, including the Stanford Binet and the three Wechsler tests. Prerequisite: Psy. 311 or Psy. 412.

2006-474—Educational-Psychological Testing (S)

3 hrs. cr.

A comprehensive study of the various psycho-educational assessment techniques, including educational, intellectual, and psycho motor. Emphasis will be placed on translating assessment data to remedial programs.

2099-498—Seminar in Psychology (demand)

1-3 hrs. cr.

The seminar meets regularly each week. Meeting time per week is equal to the number of credit hours determined by the department for a given semester. The course is designed to cover specialized knowledge and/or current research in the discipline. Topics vary by semester and situation. Prerequisite: Junior-senior standing and consent of the instructor.

2099-499—Independent Study (demand)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of department head. Prerequisite: Advanced standing in the major field. Registration in the course must be approved by adviser and department head.

RESERVE OFFICER TRAINING CORPS

(ROTC)

See Military Science

SOCIOLOGY

Division of Arts and Sciences Department of Social Science

Brown, Challman, Grant, Gubera, Tate

A Bachelor of Arts degree consists of 30 semester hours in sociology. The required courses are: Soc. 110, Soc. 210, Soc. 311, Soc. 321, Soc. 421, and Soc. 432. Within the 30 hours requirement at least 15 hours must be upper division courses. One course in general statistics or its equivalent is also required for completion of the A.B. program. An additional supporting area of 15 hours is required. A student selects this area in consultation with and by the approval of his adviser.

A Bachelor of Science degree consists of thirty-six hours in Sociology with the following courses composing the core curriculum: Soc. 110, Soc. 152, Soc. 311, Soc. 362, Soc. 421, Soc. 432. The remaining hours in sociology are elective with emphasis placed upon upper division courses. Outside the department requirements include two courses in Computer Science, Comp. 100 and Comp. 120; Principles of Macro-Economics, Econ. 201; one Geography course; and either Math 310, Elementary Statistics or Psy 311, Applied Statistics for the Behavioral Sciences. It is strongly suggested that the B.S. student take either Math 130 or Math 131 as a general education requirement in order to comply with the Computer Science curriculum. A minor outside the discipline may be selected with this program if the student so desires. All requirements indicated by the department in which the minor is selected must be met. Also a student may option for the supporting area as indicated in the B.A. degree. When a minor or supporting area is selected by the student he/she must inform the department, particularly their major adviser.

Sociology may be used as a 21 hour minor or 15 hour supporting area with certain majors. The Bachelor of Arts student selecting sociology as a minor or supporting area should consider required courses suggested for A.B. sociology majors as a guideline. It is recommended that Bachelor of Science in Education majors taking sociology as a minor or supporting area select Soc. 110, Soc. 121 and Soc. 210 plus upper division electives to satisfy the total hour requirements.

A social science major for the Bachelor of Science in Education degree, with emphasis in Sociology (Plan B), consists of 50 semester hours. The requirements are: Hist. 110, Hist. 120, Hist. 200, Hist. 205, or 210, and three upper division semester hours in U. S. History and three upper division semester hours in European History and Pol Sci. 120, Econ. 201, Geo. 211, plus 3 hrs. geography elective; Soc. 321 and electives in Sociology, 18 hours. Nine hours of the Soc. electives must be upper division.

2208-110—Introduction to Sociology (F,S) 3 hrs. cr.

An introduction to the systematic study of society. The emphasis is on the major concepts of sociology and the scientific point of view in dealing with social phenomena.

2208-121—Family (F) 3 hrs. cr.

Development of family relationships throughout the life cycle. Attention is given to courtship and engagement as well as factors promoting satisfactory family relationships.

2208-152—Introduction to Anthropology (S) 3 hrs. cr.

Attention is given to both physical and cultural anthropology. There are comparisons between "preliterate" and "literate" cultures.

2208-210—Social Problems (F,S) 3 hrs. cr.

Study of "problem areas" and "social issues" in modern society. Considers personality adjustment, strains, family problems, forms of deviancy, and group conflict in a stimulated laboratory atmosphere. The latter part of the course explores "solutions" and social engineering programs. Prerequisite: Soc. 110.

SOCIOLOGY

2208-291—Social Change (On demand) 3 hrs. cr.

Study of the causes, processes, and consequences of social change. A look at the significant theories of social change and an emphasis on how major social institutions are effected by patterns of change and the possible consequences of institutional change for society in the future.

2208-301—Sociology of Religion (F) 3 hrs. cr.

Study of religion as a social institution. Comparative religions considered for behavioral content. Major attention is given to the relationship of religion to other social institutions in contemporary society. Prerequisite: 6 hours of sociology.

2208-311—Social Stratification (F) 3 hrs. cr.

Analysis of the sociological processes in relation to social situations and interpersonal behavior. Study of factors which account for differences in influence, power and social prestige. Prerequisite: Soc. 110 or permission of the instructor.

2208-321—Social Institutions (F) 3 hrs. cr.

An analysis of the basic social institutions of human society; comparing and contrasting the structure and form among the various cultures, emphasizing interdependence and effect upon human behavior. Prerequisite: 6 hours of sociology.

2208-331—Social Work I (F) 3 hrs. cr.

A study of the historical and philosophical development of social work theory including an analysis of the rationale and techniques used in social casework. Prerequisite: Soc. 110, Soc. 121, Soc. 210.

2208-332—Social Work II (S) 3 hrs. cr.

Examination of careers and agencies in the field of social work and practical experience in volunteer work with social work agencies. Prerequisites: Social Work I plus all prerequisites for it. (Soc. 331).

2208-341—Social Psychology (F) 3 hrs. cr.

(See Psy. 341.)

2208-351—Criminology (F) 3 hrs. cr.

Examines the social-cultural concepts of crime and the theories, agencies and institutions which deal with offenders. Particular attention is given to treatment of the offender, the causation of criminal and anti-social behavior, as well as to programs of crime prevention. Prerequisite: Soc. 110 and Soc. 210.

2208-352—Group Dynamics (On demand) 3 hrs. cr.

A study of the processes underlying group interaction and action emphasizing the importance of leadership and communication in social organization. Prerequisite: Soc. 110.

2208-361—Populations Problems (F) 3 hrs. cr.

The changes in population are stressed through an analysis of birth rates, death rates, and migrations. Demographic and exological factors are stressed in relation to social stratification, ethnic and minority groups, and cultural settings. Prerequisite: 6 hours of sociology.

2208-362—Social Deviance (S) 3 hrs. cr.

Problems of social disorganization and deviant behavior in industrial societies. Deals with such topics as dilemmas of work and leisure, problems of conformity and

COURSES OF INSTRUCTION

dissent, the clash of popular myths and social realities, mental illness, alcoholic and narcotic addictions, sexual deviation, suicide, bohemianism, youth protests, alienation, anxiety, and anomie; the ambiguity of "normality."

2208-382—Minority Groups and Race Relations (S) 3 hrs. cr.

An examination of racial and cultural minorities in contemporary American society with special attention given to an analysis of prejudice and discrimination. Prerequisite: Soc. 110.

2208-391—Penology and Corrections (F) 3 hrs. cr.

A survey of the history, philosophy, and operation of penitentiary systems with special attention given to changes in adult and juvenile institutions. Probation, parole and various strategies for community treatments and therapies will be reviewed and evaluated. Prerequisite: Soc. 110, Soc. 210, Soc. 351.

2208-402—The Community—Rural and Urban (S) 3 hrs. cr.

Survey of the operation of social processes in groups which share common bonds of territory and cultural interests. Limited attention to the international community. Major attention to the American scene, including the regional, rural, urban, ethnic, and status communities. Prerequisite: 9 hours of sociology.

2208-412—Juvenile Delinquency (S) 3 hrs. cr.

Consideration is given to environment and social background for the study of juvenile delinquency. Emphasis is placed upon factors of causation as revealed through personal, family and community situations conditioning delinquent behavior; analysis of concrete cases of juvenile delinquency; and examinations of current methods of dealing with juvenile offenders and programs for the prevention of delinquency. Prerequisite: Soc. 110, Soc. 210.

2208-421—Sociological Theory (F) 3 hrs. cr.

Classical and contemporary social philosophy related to the current theoretical and applied systems of sociology. A study of social thought from Comte to Parsons, utilizing interpretation and evaluation of these philosophies as they relate to the present social conditions. Prerequisite: 9 hours of sociology.

2208-432—Sociological Investigations (S) 3 hrs. cr.

Group and individual research in the scientific and methodological applications of sociology through quantitative and qualitative techniques of obtaining social data. Critical evaluation of the designs and methods used in sociological research and fieldwork. Prerequisite: 12 hours of sociology.

2208-441—Collective Behavior (On demand) 3 hrs. cr.

A study of the behavior of people in large groups; collective interstimulation and emotions, crowds, audiences, and publics; mass stimuli and mass response.

2208-498—Seminar in Soc. (demand) 3 hrs. cr.

A seminar for upper division sociology majors. The topics covered and methods used will place emphasis on student-instructor interest, desire to pursue in-depth research, and ability to assimilate topics. It will include areas not already treated in other sociology courses. Permission of instructor required.

2208-499—Independent Study (On demand) 1-3 hrs. cr.

An independent study structured by the adviser with the approval of the department head and division dean. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by the department head and division dean.

SPEECH

Division of Arts and Sciences Department of Language and Literature

Cornwell, Finton, Rhodes

A major in Speech for the Bachelor of Arts degree consists of 44 semester hours. Required courses for a major emphasis in Speech are Sp. 102, Sp. 131, Sp. 210, Sp. 212, Sp. 213, Sp. 300, Sp. 302, Sp. 311, Sp. 498, Forensics Workshop 8 hours, Th. 331, Th. 332, Th. 351.

A major emphasis in speech and theatre in the Bachelor of Science in Education curriculum, one of two teaching fields (Plan A), consists of 33 semester hours of speech and theatre. Either speech or theatre may be emphasized. Required courses for a major emphasis in Speech are Sp. 102, Sp. 210, Sp. 213, Sp. 302, Sp. 311, Sp. 498, Forensics Workshop 6 hours, Th. 331, Th. 332, Th. 351.

A major in speech and theatre as one teaching field (Plan B) includes 41 semester hours. Required courses with an emphasis in Speech are Sp. 102, Sp. 131, Sp. 210, Sp. 213, Sp. 300, Sp. 302, Sp. 311, Sp. 498, Forensics Workshop 8 hours, Th. 331, Th. 332, Th. 351.

Speech 100-Speech Techniques is a prerequisite for all speech courses except Speech 131 and Speech 302.

1506-100—Speech Techniques (F,S) 3 hrs. cr.

A practical course designed to improve or to develop self-expression. Emphasis is placed on development of principles of effective oral communication.

1506-102—Public Speaking (S,Odd) 3 hrs. cr.

Practice in preparation and delivery of impromptu and extemporaneous speeches. Prerequisite: Sp. 100.

1506-121, 122, 221, 222, 321, 322, 421, 422
Forensics Workshop (F,S) (per sem.) 2 hrs. cr.

A practicum in the area of forensics, including research, organization, and presentation of the current debate proposition along with the development and presentation of individual events.

1506-131—Voice and Articulation (F,S) 3 hrs. cr.

Techniques for improving the speaking voice. Attention to phonetics, articulation, pronunciation, and general expression.

1506-210—Discussion Techniques (F) 3 hrs. cr.

Studies in the field of group discussion designed to point out the different types of discussion through participation.

1506-212—Oral Interpretation (S) 3 hrs. cr.

Study and application of principles and techniques of oral reading. Includes analysis of different types of literature with emphasis upon platform presentation of prose and poetry.

1506-213—Argumentation and Debate (F) 3 hrs. cr.

A study of the modern forms of evidence, evaluation, and argument, and of methods of refutation and ethical relationships of these methods in a free society.

1506-300—Speech Analysis (S, Odd) 3 hrs. cr.

The study and practice of organization, composition, delivery, and analysis of speeches for individual enrichment.

1506-302—Business and Professional Speech (F,S) 3 hrs. cr.

A practical course designed to meet the speaking needs of business and professional people.

COURSES OF INSTRUCTION

1506-311—History and Criticism of Modern Public Address (On demand)

3 hrs. cr.

A critical study of speakers and speeches selected to present the characteristic ideas of leading social and political developments in national and international affairs since 1918. A lecture, reading, and discussion course.

1506-498—Seminar—Studies in Discussion (F, Even)

3 hrs. cr.

Studies in group thinking and group reaction with a view to improving discussion and conference techniques in the classroom, business and professional situations.

1506-499—Independent Study in Speech (F,S)

1-3 hrs. cr.

An independent study course structured by the adviser with approval of the department head and division dean. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration must be approved by adviser, department head and division dean.

SPEECH CORRECTION

0815-371—Introduction to Speech Science (On demand)

3 hrs. cr.

A study of the anatomy, psychology, and physics of speech including the examination of key research on the scientific bases of speech, and the theories and controversial concepts for personal identity and for social control.

0815-492—Principles and Techniques of Speech Correction (S)

3 hrs. cr.

A study of the nature, causes, diagnosis and treatment of speech defects of children and adolescents, primarily for the classroom teachers. Recommended for all students preparing to teach in any field.

FINE ARTS

THEATRE

Division of Arts and Sciences

Brietzke, Bowman, Claussen, Hunt

A major in Theatre for the Bachelor of Arts degree consists of 49 semester hours. Required courses for a major emphasis in theatre are: Theatre lab 4 hours, Th. 142, Th. 231, 232, 233, Th. 241, Th. 331-332, Th. 341, Th. 351, Th. 362, Th. 372, Th. 422 or Th. 431, Th. 441, Sp. 100 or 131 (Gen. Ed.), Sp. 212, Art 100, Hist. 200, Art 301 or 302.

Recommended electives: Intro. to Bus., Econ., Accounting, Eng. 450 and 451.

A major emphasis in theatre and speech in the Bachelor of Science in Education curriculum, one of two teaching fields (Plan A), consists of 33 semester hours of theatre and speech. Required courses are: Theatre lab 4 hours, Th. 142, Th. 232, Th. 233, Th. 331, Th. 332, Th. 241 or Th. 341, Th. 351, Th. 372, Sp. 100 or Sp. 131 (Gen. Ed.), Sp. 101, Sp. 212, Sp. 210 or Sp. 498.

Recommended electives: Th. 231, Th. 362, Th. 441, Art 100, Business, History, Literature, Journalism.

A major in theatre and speech as one teaching field (Plan B) includes 40 semester hours. Required courses are: Theatre lab 4 hours, Th. 142, Th. 231, 232, 233, Th. 241 or 341, Th. 331, Th. 332, Th. 351, Th. 362, Th. 372, Th. 441, Sp. 100 or Sp. 101 (Gen. Ed.), Sp. 212, Sp. 210 or Sp. 498.

Recommended electives: Th. 362, Th. 441, Art 100, Business, Literature, History, Journalism.

THEATRE

THEATRE

- 1007-Th. 101, 102, 201, 202, 301, 302, 401, 402—
Theatre Performance (F,S)** 1 hr. cr.
The performance of a major role in a theatre production which has met departmental standards. A student may accumulate up to 5 hours of credit. Credit is applied after departmental evaluation and approval at the end of each semester.
- 1007-110—Theatre Appreciation (F,S)** 3 hrs. cr.
Survey of contributions to dramatic production of all ages by playwrights, directors, designers. Appreciation of dramatic form and style. A humanities course for the non-drama major.
- 1007-121, 122, 221, 222, 321, 322—Theatre Laboratory (F,S) (Per Sem.) 2 hrs. cr.**
A laboratory and, whenever possible, lecture course devoted to the mounting of major productions.
- 1007-142—Theatre Technology (S)** 3 hrs. cr.
An introduction to scenery construction techniques and terminology, technical drawing as applied to theatre design, stage lighting techniques, sound techniques, and stage rigging.
- 1007-201—Summer Theatre Production (demand)** 6 hrs. cr.
Includes active participation in the summer theatre presentations. Special instruction in voice and diction, movement, acting, and basic stagecraft.
- 1007-231—Theatre Practicum (F) Stage Speech and Dialects** 1 hr. cr.
A laboratory demonstration course designed to acquaint the student with the techniques and vocal exercises necessary for proper stage speech, free of regionalism. In addition, the course introduces the student to methods for creating effective stage dialects.
- 1007-232—Theatre Practicum (F) Costume Technology** 1 hr. cr.
A practical laboratory course providing the student with: basic skills in sewing, dyeing materials, pattern reading and cutting of material, and in selection of and care of material.
- 1007-233—Theatre Practicum (F) Stage Make-up** 1 hr. cr.
A demonstration and laboratory course in practical design and application of fundamental techniques of stage make-up. The course surveys types, categories of professional make-up, as well as sources and costs of materials.
- 1007-331, 332—History of the Theatre (F,S) (Per Sem.) 3 hrs. cr.**
(331) History and study of the development of theatre and theatre arts; form, style, and structure of drama from the Greeks to the Elizabethan era;
(332) Jacobean to contemporary American theatre.
- 1007-241—Acting I (F, Odd)** 3 hrs. cr.
A basic performance and theory course, analysis and creation of a role; stage movement and pantomime; basic stage techniques.
- 1007-341—Acting II (F, Even)** 3 hrs. cr.
A methods course in analysis, rehearsal, and performances of scenes from contemporary and classic plays. Emphasis on the actors relationship to the play and other actors.
- 1007-422—Acting III (S, Even)** 3 hrs. cr.
Lecture and laboratory study of physical manners, posture, movement, rhythm, gesture, and vocal qualities in relation to various periods of theatre presentation. Prerequisite: Th. 341, or consent of instructor.

COURSES OF INSTRUCTION

1007-351—Play Production (F)

3 hrs. cr.

Techniques and problems of mounting a play. Includes a basic analysis of the construction of the drama, along with basic elements of costume, stagecraft, and make-up.

1007-362—Stage Costume and Design (S)

3 hrs. cr.

Survey of clothing styles throughout the history of the western world with emphasis upon theory and practical application of design to stage costume.

1007-372—Directing for the Stage (S)

3 hrs. cr.

Study of the skill and role of the director, script analysis, casting, production administration, and director-actor relationships. Each student enrolled will have a directing project or will assist the staff as student director for a major production.

1007-431—Creative Dramatics (F, Odd)

3 hrs. cr.

A study of theatre for children with emphasis upon the awakening of the creative imagination through various types of literature.

1007-441—Stage Design (F)

3 hrs. cr.

Principles and history of scenic design, sketching, rendering, scene painting techniques. Study of set design related to various styles of drama. Stage lighting approached from the practical and aesthetic values. Prerequisite: Th. 142 or consent of instructor.

1007-499—Independent Study in Theatre (F,S)

1-3 hrs. cr.

An independent study course structured by the advisor with approval of department head. Prerequisite: Advanced standing in the major field with a grade point average of 3.0. Registration in the course must be approved by advisor, department head, and division dean.



Combined/Affiliated Degree Programs

Missouri Southern State College has established several combined degree programs whereby the student completes a structured number of academic hours under the regulations established by the College and combines with this the satisfactory completion of the professional/occupational curriculum from a school with which the College has an agreement. Some of the combined programs lead to a Bachelor's (four-year) degree, while others lead to an Associate (two-year) degree. A description of these programs follows:

BACCALAUREATE DEGREE PROGRAMS

(Basic Requirements for All Programs)

1. Complete 94 semester hours at Missouri Southern State College. Transfer credit will be considered, but the last 30 of the 94 required semester hours must be earned at MSSC.
2. The 94 hours must include the completion of the general education requirement plus the specialized courses required by the program in which the student is enrolled.
3. Sixteen out of 94 semester hours must be upper division (300 and 400 level courses).
4. All applicable "Requirements for Graduation" as stated in the Missouri Southern State College catalog must be met including the application for degree candidacy, the graduation fee, and the filing of credentials with the Placement Office.
5. A transcript from the institution with which a combined degree agreement is arranged must be provided in order to complete the requirements for a degree.

Engineering:

A combined degree may be arranged with approved and accredited colleges of engineering when the two institutions agree on a student applicant for the program. The student must complete three semesters at the school of engineering at "C" average or above and be certified eligible to continue in the engineering school. The Vice President for Academic Affairs negotiates the agreements with other institutions.

Medicine:

The Missouri Southern State College student applying for a combined degree with an approved and accredited school of medicine must normally have a "B" or better grade average to be considered. The Vice President for Academic Affairs will work out a combined degree with the school of medicine if the candidate is accepted for admission into the medical school. The student must complete three semesters in the medical school with a grade average of "C" or above and be certified eligible to continue in the school of medicine.

Law:

A combined degree may be arranged with approved and accredited colleges of law when the two institutions agree on a student applicant for the program. The Missouri Southern State College student applying for a combined degree with an approved and accredited school of law must normally have a "B" or better grade average to be considered. The Vice President for Academic Affairs will work out a combined degree with the school of law if the candidate is accepted for admission into the law school. The student must complete three semesters in the law school with a grade of "C" or above and be certified eligible to continue in the school of law.

COURSES OF INSTRUCTION

Medical Technology:

The Bachelor of Science in Medical Technology, with emphasis in biology and chemistry is granted to students who complete this program of study satisfactorily. The college has agreements with St. John's School of Medical Technology, Joplin; Antaeus Lineal Associates, Fayetteville, Arkansas; Baptist Medical Center, Little Rock, Arkansas; Lester E. Cox Medical Center School of Medical Technology, Springfield, Missouri; Research Hospital, Kansas City, Missouri; Sparks Regional Medical Center, Fort Smith, Arkansas and Baylor University Medical Center, Dallas, Texas. If a student wishes to attend an accredited school of medical technology with which the College has no formal agreement, the Vice President for Academic Affairs can negotiate an agreement for the individual student.

The student makes separate application to the school of medical technology which bases its admission decision on its own academic and personal standards. A person is a member of only one student body at a time. He is eligible for the benefits of the student body of which he is a member, but he does not hold membership in both student bodies simultaneously.

Course requirements, in addition to the general education requirements for the Bachelor of Science degree, are Bio. 121, 231, 305, 306, 318 and 456, Chem. 101, 102, 162, 201 and 300, and Phy. 151 and 152, and Math 140.

ASSOCIATE OF SCIENCE PROGRAMS

(Requirements Basic to All Associate of Science Combined Degrees)

1. The completion of 32 academic hours, the last 15 of which must be taken in residence at Missouri Southern State College.
2. The minimum cumulative and major field grade point average must be 2.0 or above.
3. The completion of the general education requirements as outlined in the catalog for the Associate of Science degree.
4. The student must satisfactorily complete the occupational/professional courses of the affiliated occupational or professional school as required in the agreement between the two institutions.
5. All applicable "Requirements for Graduation" as stated in the Missouri Southern State College catalog must be met including the application for degree candidacy, the graduation fee, and the filing of credentials with the Placement Office.
6. A transcript from the institution with which a combined degree agreement is arranged must be provided in order to complete the requirements for a degree.

ENVIRONMENTAL HEALTH TECHNOLOGY

Division of Technology

The Associate of Science degree in Environmental Health Technology is in affiliation with the Water and Wastewater Technical School at Neosho, Missouri. The combination of Missouri Southern requirements that are basic to all combined associate degrees, the specific courses required for the associate degree in Environmental Health Technology, plus the completion of a minimum of 48 weeks of approved study at the Water and Wastewater Technical School will qualify the student for the Associate of Science degree.

The specific courses required at Missouri Southern, in addition to the general education requirements, are Chem. 101, Chem. 102, Bio. 101 and 211 (or Bio. 312 for students completing courses at the Water and Wastewater Technical School prior to attending Missouri Southern State College).

Note that the student may complete the requirements at either school first. He is, however, a member of only one student body at a time.

RADIOLOGIC TECHNOLOGY

Division of Technology

The Associate of Science degree in Radiologic Technology is in affiliation with St. John's School of Radiologic Technology. It combines successfully completed studies at St. John's School, or at other accredited schools of Radiologic Technology with which an agreement is made, and the prescribed academic curriculum at Missouri Southern State College. Upon successful completion of the curriculum, the individual is eligible to take the National Registry examinations to become a registered Radiologic Technologist.

The Associate of Science in Radiologic Technology requires, in addition to the general education courses (see page 55), all Radiology courses, Bio. 221, Psy. 221, and Chem. 100. Applicants who have not met the prerequisites for Bio. 221 must complete them before being admitted to the program.

In addition to established fees for all college students, special fees of \$100 for the first semester and \$40 for each succeeding term, including summers, are required for enrollment in Radiology courses.

Students who are already registered radiologic technologists may also enter this program.

Credit equal to the credit given at the time radiologic technologists enter Missouri Southern for Radiological courses is granted the individual. A minimum of 30 additional academic semester hours is required. This credit would include the general education requirements for the Associate of Science degree plus a concentration of courses in one of the subject-matter areas of business (Accounting and Secretarial Procedures or Business Management), behavioral sciences, or natural science (concentration in either Biology, Chemistry, or Physics).

Below are the courses taught at St. John's School of Radiologic Technology and which become a part of Missouri Southern State College's Associate of Science degree in Radiologic Technology.

COURSE DESCRIPTIONS

5207-101—Introduction fo Radiology

3 hrs. cr.

An overview of the organization, function, supervision, and financing of a radiology department including the relationship with other hospital departments. The course includes a history of x-ray, ethical principles, and legal aspects of technology and elementary radiation protection. Five hours of lecture and five hours of lab per week.

5207-111—Medical Terminology

5 hrs. cr.

Provides a background in the language of medicine, especially as related to radiology, through a comprehensive study of the more common medical roots, prefixes and suffixes. Every attempt is made to relate medical roots to everyday English words. A survey of medical and surgical diseases is included. Five hours of lecture per week.

5207-121—Patient Care and Special Procedures in Radiologic Technology

3 hrs. cr.

Routine and special care of the patient. The medical team concept of patient care is stressed. Includes sterile techniques, preparation and use of contrast materials. Five hours of lectures and demonstrations per week.

5207-132—Principles of Radiographic Exposure

3 hrs. cr.

The fundamental principles of technique and technique conversion with particular emphasis on the factors that directly and indirectly affect radiographic exposure. Emphasis on dark room chemistry and technique are also included in this course. Five hours of lecture and demonstrations per week.

COURSES OF INSTRUCTION

- 5207-142—Radiographic Positioning I** 3 hrs. cr.
Basic radiographic positioning including both standard and specialized positions of the extremities and the spine. Film critique is included. Five hours of lecture and demonstrations and five hours of clinical lab per week.
- 5207-152—Osteology** 3 hrs. cr.
The structure and function of the human body with emphasis on organs, osteology, and topgraphic anatomy. Five hours of lecture and demonstrations per week.
- 5207-160—Film Critique** 2 hrs. cr.
Develops a student's ability to evaluate x-ray films as to technical quality and diagnostic interpretation. Five hours of lecture and demonstrations per week. Course meets for 14-week session.
- 5207-170—Radiologic Physics I** 3 hrs. cr.
The physics of radiology. The physical principles of x-ray production, radiographic exposure, film density and construction, fluorescent screens, etc. Basic equipment maintenance is included. Course meets for 14-week session. Five hours of lecture and demonstration and five hours of lab per week.
- 5207-180—Practicum in Radiology I** 5 hrs. cr.
Designed to develop the knowledge and skills necessary to produce x-ray films with speed and accuracy. Course meets for 14-week session. Twenty-five hours of lab per week.
- 5207-241—Radiographic Positioning II** 3 hrs. cr.
An in-depth study of routine and special views of the skull and facial bones. Film critique is included. Five hours of lecture and demonstrations and five hours of lab per week.
- 5207-271—Radiologic Physics II** 3 hrs. cr.
Physical principles of radiation therapy and isotopes. Includes theory, application and basic equipment maintenance. Five hours of lecture and five hours of lab per week.
- 5207-252—Radiographic Positioning III** 3 hrs. cr.
Procedures and techniques for examination of various organs, including vascular studies and all special procedures. Includes film critique. Five hours of lecture and demonstrations and five hours of lab per week.
- 5207-282—Practicum in Radiology II** 3 hrs. cr.
A continuation of Rad. 180. Ten hours of lab per week.
- 5207-290—Practicum in Radiology II** 5 hrs. cr.
Intensive clinical experience in regular working conditions under the close supervision of a radiologist and an experienced radiation therapy technologist. Course meets for a minimum of 14 weeks. Thirty-five hours of lab work.
- 5207-299—Advanced Radiology** 3 hrs. cr.
A comprehensive review of the field of Radiologic Technology including innovations, trends and anticipated advancements in the field. Course meets for a minimum of 14 weeks. Five hours of lecture per week.

A Combined One-Course Program

Aviation

Division of Technology

This course is offered in affiliation with the Aero Southwest Company of Carthage, Missouri and the Mizzou Aviation Company of Joplin, Missouri.

COURSE DESCRIPTION

5302-200—Basic Pilot Training

5 hrs. cr.

An integrated course designed to meet ground school and flight training requirements for eligibility to take Federal Aviation Administration examination for a Private Pilot Certificate. In addition to scheduled ground school classes, course requires approximately 40 hours of dual and solo flight and check flight. Credit awarded when FAA certificate is obtained. Special fees and third class medical certificate required. Special fees for this course include plane rental and examiner's test fee. Course grade is recorded as Pass or Fail.

PRE-PROFESSIONAL AND TECHNOLOGY CURRICULA

Pre-Professional (Associate of Arts Degree)

The Junior College transfer curricula are designed for students who desire later to work for a baccalaureate degree at Missouri Southern State College, or to transfer to other baccalaureate degree granting institutions. It should be clearly understood by the student that all such institutions have their own entrance requirements, and any student interested in such prospective transfer should consult the latest catalogues of those colleges. The curricula set forth in this section under various headings are ordinarily sufficient to satisfy requirements of other colleges and universities.

Students beginning their education at Missouri Southern State College with the intention of earning a baccalaureate degree should study the general education and major requirements for that degree.

The following programs for students planning to enter the fields of Agriculture, Dentistry, Engineering, Journalism, Medicine, Optometry, and Pharmacy lead to the Associate of Arts degree and are normally transferable to other institutions. Each takes two years and 62 or more semester hours to complete. Programs applicable to other fields may be planned in accord with the criteria stated on page 55. The curricula requirements are:

1. Agriculture.

 - a. General Education (see page 55).
 - b. Five semester hours each in chemistry, botany or zoology, and economics.
 - c. Three semester hours each in algebra, accounting, psychology (general), and sociology.
 - d. Ten hours of electives, selected according to transfer needs.
 - e. All courses must be approved by the adviser.
 2. Dentistry.

 - a. General Education (see page 55).
 - b. Eight hours of chemistry, five of zoology, five of microbiology, and eight of physics.
 - c. Six hours of electives, selected according to transfer needs, check with the Biology Dept. concerning specific transfer needs.
 3. Engineering.

The student entering pre-engineering must present four high school units in mathematics and one unit in a laboratory science.

ONE-COURSE PROGRAM

- a. General Education (see page 55). (15 hrs.)
- b. Mathematics 150, 250, and 260. (8 hrs.)
- c. Chemistry 101 and 102 (6 hrs.)
- d. Drafting 110 and 120* (10 hrs.)
- e. Physics 250 and 260 (4 hrs.)
- f. Electives
*Drafting 120, Descriptive Geometry, is not required for chemical or electrical engineers.

4. Journalism.

The student planning to enter a journalism school must complete 60 credit hours in Arts and Science, including the following specific requirements:

- a. General Education (see page 55). (13 hrs.)
- b. One foreign language (3 hrs.)
- c. Economics (3 hrs.)
- d. U. S. Government (6 hrs.)
- e. English Literature
- f. Electives should be chosen from sociology, psychology, philosophy, mathematics, accounting, English and journalism.

5. Medicine.

- a. General Education (see page 55). (15 hrs.)
- b. One foreign language (15 hrs.)
- c. Chemistry, qualitative analysis (8 hrs.)
- d. Physics
- e. Check with the Biology Dept. concerning specific transfer needs.

6. Optometry.

- a. General Education (see page 55). (3 hrs.)
- b. English literature (5 hrs.)
- c. Calculus (5 hrs.)
- d. Zoology (8 hrs.)
- e. Chemistry (8 hrs.)
- f. Physics (3 hrs.)
- g. General psychology (5 hrs.)
- h. Electives, according to transfer needs
- i. Electives to fulfill transfer needs, check with the Biology Dept. concerning 3 hrs. specific transfer needs.

7. Pharmacy.

- a. General Education (see page 55). (5 hrs.)
- b. Algebra and trigonometry (10 hrs.)
- c. Zoology and botany (8 hrs.)
- d. General chemistry (8 hrs.)
- e. Physics (3 hrs.)
- f. Accounting (8 hrs.)
- g. Qualitative analysis and analytical chemistry (8 hrs.)

TECHNOLOGY

(Associate of Science Degree)

The courses of study leading to the Associate of Science degree in Automotive Technology, Computer Science, Dental Hygiene, Drafting and Design, Law Enforcement, Machine Technology, Nursing and Radiologic Technology are described in the "Curriculum" section of this catalog under their respective headings.

The suggested Orders of Study for these programs are found immediately following this section.

THE DIVISION OF CONTINUING EDUCATION

The Division of Continuing Education is administered by the Director of Continuing Education. It is designed to offer credit and non-credit courses that are not in the regular curriculum, but which will meet community and societal needs. Business, industry, and civic leaders are requested to make known the educational needs of their areas. The college will do its best to help meet those needs.

The Division of Continuing Education is supported by moderate student fees paid by all participants. The course fees are determined primarily by the length of the class.

Courses offered in the Division of Continuing Education may or may not count toward an associate or baccalaureate degree. Students wishing to apply continuing education semester hour credit toward a college degree must petition for the credit. Petitions are available in the Continuing Education Office.

New courses are announced on a weekly basis. The announcements are carried by various news media.

All Continuing Education enrollment is conducted by the Office of Continuing Education located in Room 105 of Hearnes Hall. A permanent record is kept in the Continuing Education Office for each student. Students will be provided copies of their records upon request.

Persons wishing additional information are urged to call, write, or visit the Continuing Education Office.

The following pages contain a **suggested** procedure for completing the requirements for each degree or transfer program offered by Missouri Southern State College. These are suggestions only. Course requirements for each major will be found in the "Courses of Instruction" section of this catalog, pages 69 through 164. The General Education requirements for each degree will be found in the "Academic Regulations" section of the catalog, pages 49 through 63.

Prerequisite courses, those courses that should be satisfactorily completed before attempting a given course, are designated by parenthesis.

Example: Chem 101 General Chemistry (Math 140)

Recommended or suggested General Education courses are within brackets. Other General Education courses may be taken in place of or substituted for those courses.

Example: Gen. Educ. [Speech 100]

The student may prefer to enroll in Sp 131 or Sp 302 or in another General Education course and enroll in a speech course during another semester.

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
ACCOUNTING MAJOR
Suggested Order of Study**

MAJOR CODE 118

1st Semester	FIRST YEAR		2nd Semester
Course	Hours	Course	Hours
Acct 101 Elementary Accounting		Acct 102 Elementary Accounting	
Accounting I	3	Accounting (Acct 101)	3
Eng 101 Composition	3	Gen Educ [Psy 100 or Soc 110]	3
GB 101 Introduction to Business	3	Sp 100 Speech Techniques	3
GB 121 Office Machines	3	OA 102 or 200 Typing	3
Math 30 Inter Algebra or Math 110		Gen Educ [PSc 120 or Hist 110]	
[Math 131]	3	HPER 101 Intro of Physical	
Psy 120 Freshman Orientation	1	Activities	2
	<u>16</u>		<u>17</u>
SECOND YEAR			
Acct 212 Intermediate Accounting		Acct 401 Tax Accounting (Acct 102)	
(Acct 102)	3	MM 350 Principles of Management	3
Acct 310 Cost Accounting (Acct 102)	3	Econ 202 Principles of Economics	3
GB 301 Business Law I	3	Gen Ed [Humanities or Fine Art]	3
Gen Ed [Science]	4-5	Elective in Business	3
Econ 210 Principles of Economics	3		15
	<u>16-17</u>		

() Prerequisite course

[] Recommended by Dept.

Electives must be selected from:

Business Law II

Auditing

Business Statistics I

Seminar in Managerial Accounting

For Additional Information Contact:
Dr. Julio Leon
Office: 117 Business Bldg.
Phone: 249

**BACHELOR OF SCIENCE IN
BUSINESS ADMINISTRATION
ACCOUNTING MAJOR
Suggested Order of Study**

MAJOR CODE 70

1st Semester	FRESHMAN		2nd Semester
Course	Hours	Course	Hours
Acct 101 Elem Accounting I	3	Acct 102 Elem Accounting II	
Eng 101 Composition	3	(Acct 101)	3
Elective [Psy 100 recommended]	3	Eng 102 Composition (Eng 101)	3
HPER 101 Intro to Physical Activity I	2	Hist 110 U.S. History 1492-1877	3
GB 101 Intro to Business	3	Math 131 Finite Math	3
Psy 120 Freshman Orientation	1	Gen Ed [Fine Arts]	3
Electives	2	HPER 160 Personal Health	2
	<u>17</u>		<u>17</u>
SOPHOMORE			
Acct 212 Intermed Acct I (Acct 102)	3	Acct 301 Intermed Acct II (Acct 212)	3
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Gen Ed [Bio 101 Gen Biology or equiv]	4	Gen Ed—[Phys 100 Fund of Physical Sci or equiv]	5
Gen Ed [Speech]	3	Comp 100 Intro to Data Processing	3
PSc 120 Government: National, State Local	3	GB 320 Business Communications	3
	<u>16</u>		<u>17</u>

SUGGESTED ORDER OF STUDY

Acct 310 Cost Accounting
 GB 301 Business Law I
 MM 300 Principles of Marketing
 MM 350 Principles of Management
 Gen Ed—[Fine Arts]

JUNIOR		
3	Acct 302 Advanced Accounting	3
3	[GB 302 Business Law II]	3
3	GB 321 Business Statistics (Math 131)	3
3	GB 337 Managerial Data Processing	
3	(MM 350)	3
15	Gen Ed—[Humanities—Fine Arts]	3
		15

Acct 411 Auditing
 Acct 401 Tax Accounting
 Econ 350 Financial Management
 (Econ 201 Acct 102)
 Electives
 —Apply for Graduation 100 Hearn's Hall

SENIOR		
3	Elective in Accounting	3
3	MM 452 Business Policy	3
3	Electives	9
6		
		15

15

() Prerequisites
 [] Departmental recommendation

For Additional Information Contact:
 Dr. Julio Leon
 Office: 117 Business Building
 Phone: 249

AGRICULTURE-PRE Suggested courses

MAJOR CODE 131

Requirements for a degree in Agriculture vary from one college to another. In most cases a student may attend MSSC for four semesters and complete the requirements for an Associate of Arts degree prior to transfer. It is the responsibility of the student to contact the college that will confer a Bachelor's degree in Agriculture for a list of recommended courses that will apply toward the degree at the second college.

1st Semester

Course
 Bio 101 General Biology
 Math 130 College Algebra
 Eng 101 Composition
 *Gen Educ

FRESHMAN

Hours
 4
 3
 3
 5
15

2nd Semester

Course
 Bio 112 Botany (Bio 101) OR Bio 122
 Zoology (Bio 101)
 Eng 102 Composition (Eng 101)
 Chem 100 Intro to Chem OR
 Chem 101 Gen Chem I
 *Gen Educ

Hours
 3
 3
 5
 6
17

*See list of General Education requirements for Associate of Arts Degree.

() Prerequisite course

For Additional Information Contact:
 Dr. Sam Gibson
 Office: 308-D Science Bldg.
 Phone: 226

SUGGESTED ORDER OF STUDY

**BACHELOR OF ART DEGREE
ART MAJOR
Suggested Order of Study**

MAJOR CODE 40

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Art 100 Art Composition	3	Art 120 Ceramics (Art 100 or 110)	3
Art 110 Intro to Art	3	Art 130 Drawing Tech (Art 100) OR	3
Eng 101 Composition	3	Art 211 Sculpture (Art 100 & 120)	
Hist 110 or 120 U.S. History	3	Eng 102 Composition (Eng 101)	3
Gen Ed [Literature]	3	[Psy 100 Gen Psychology]	3
HPER 101 Physical Activity	2	Math 110 Intro to Col Math or equiv	3
Psy 120 Freshman Orientation	1		
	18		15

SOPHOMORE

Art 132 Intro to Design	3	Art 232 Paint Tech (100, 130)	3
Art 211 Sculpt Tech (100, 121)	3	Art Electives	6
Art 230 Basic Form (100)	3	Bio 101 Gen Bio or equiv	4
Gen Ed [Speech 100 or equiv]	3	PSc 120 Government	3
Gen Ed [Psys 100 Fund of Phys Sci]	5	PE Act or Personal Health	2
	17		18

Art Dept. Requirements for Bachelor of Art with an Art Major.

- Art 100 Art Composition
 - Art 120 Ceramics (Art 100 or 110)
 - Art 130 Drawing Techniques (Art 100)
 - Art 132 Intro to Design
 - Art 211 Sculpture Tech (Art 100, 120)
 - Art 230 Basic Form (Art 100)
 - Art 232 Paint Tech (Art 100, 130)
 - Art 301 & 302 Art History
 - Art 312 Beginning Printmaking (Art 130)
 - Art 490 Senior Studio (Senior standing)
- Plus 18 credit hours approved by the upper division Art Advisor.

Art Electives	cr.
Art 200 Arts and Crafts	(3)
Art 205 Beg Jewl & Silv.	(3)
Art 220 Art Education	(3)
Art 300 Adv. Drawing	(3)
Art 310 Watercolor	(3)
Art 321 Adv. Sculpture	(3)
Art 322 Adv. Sculpture	(3)
Art 330 Adv. Jewl & Silv	(3)
Art 401 Adv. Painting	(3)
Art 407 Adv. Ceramics	(3)
Art 412 Commercial Art	(3)
Art 421 Head Study	(3)
Art 430 Adv. Printmkg	(3)
Art 498 Seminar in Art	

Art 420 & 440—Special Projects in Art I-II
3 cr. hrs. each—additional advanced study in a chosen art medium. Prerequisite: successful completion of advanced studio course and instructor's approval

Foreign Language
10 credit hours of the same language required

For Additional Information Contact:
Mr. Darral Dishman
Office: 303 Art Building
Phone: 263

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
ART MAJOR**
Plan B-Single Teaching Field
Suggested Order of Study

MAJOR CODE 20

1st Semester	FRESHMAN	2nd Semester
Course	Hours	Course
Art 100 Art Composition	3	Art 120 Ceramics (Art 100 or 110)
Art 110 Intro to Art	3	Art 130 Drawing Techniques OR
Eng 101 Composition	3	Art 211 Sculpture Techniques (Art 120)
Hist 110 or 120 U.S. History	3	Eng 102 Composition
Gen Ed [Pol Sc 120]	3	Psy 110 Psy. of Human Development
Gen Ed [HPER 101]	2	Gen Ed [Math 110 or equiv]
Psy 120 Freshman Orientation	<u>1</u> 18	
		Hours
		3
		3
		5
		3
		<u>17</u>
SOPHOMORE		
Art 132 Intro to Design OR	3	Art 232 Painting Technique (Art 130)
Art 230 Basic Form (Art 100)		Gen Ed [Literature]
Art 211 Sculpture Technique (Art 120)	3	Gen Ed [HPER 160]
Art 220 Art Education	3	Gen Ed [Phys Sci 100 or equiv]
Gen Ed [Speech]	3	Gen Ed [Literature or Fine Arts]
Gen Ed [Bio 101 or equiv]	<u>4</u> 16	—Apply for Admission to Teacher Education Program-226 Educ-Psych Bldg
		<u>16</u>
JUNIOR		
Art 301 Art History	3	Art 302 Art History (Art 301)
Art 312 Printmaking	3	Art Electives
Art Elective	3	Psy 302 Exceptional Child (Psy 110)
Educ 310 Educ Psych (Psy 110)	3	Educ 330 Structures of Teaching
Elective	3	(Ed 310)
	<u>15</u>	Educ 331 Video Lab
		<u>1</u> 14
SENIOR		
Art 490 Senior Studio	2	*Professional Education Semester
Art Electives	6	
Electives	6	
—Make application for graduation		—Register for National Teachers Exam
100 Hearnes Hall	<u>14</u>	226 Educ-Psych Bldg.
		<u>16</u>

() Prerequisites

[] Departmental Recommendations

*Educ 464 should be taken by those people wanting certification in K through 12.

For Additional Information Contact:
Mr. Darrell Dishman
Office: 303 Art Building
Phone: 263

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
AUTOMOTIVE TECHNOLOGY MAJOR
Suggested Order of Study**

MAJOR CODE 110

1st Semester		FIRST YEAR		2nd Semester	
Course	Hours	Course		Hours	
Auto 100 Automotive Engines	7	Auto 120 Automotive Electrical and Emission Control		7	
Math 30 Intermediate Algebra	3	Auto 110 Technical Mathematics		3	
Eng 101 Composition	3	Draf 110 Introductory Drafting		3	
Phys 100 Physical Science	5	Psy 110 General Psychology OR Soc 110		3	
Psy 120 Freshman Orientation	1	Sp 100 Speech Techniques		3	
	19				19
SECOND YEAR					
Auto 200 Automotive Chassis Brakes and Transmissions	7	Auto 250 Automotive Body and Paint		7	
Auto 220 Automotive Air Conditioning and Power Accessories	4	Auto 260 Automotive Service Mgt.		7	
Auto 190 Technical Science	4	Hist 110 U.S. History 1492-1877 OR PSc 120		3	
Auto 130 Automotive Business Management OR Acct 101 Elem Acct I	3	Gen Ed—[Fine Arts or Lit]		3	
HPER 160 Personal Health	2				20
	20	For Additional Information Contact: Mr. Roger Adams Office: 112 Technical Bldg Phone: 277			

**BACHELOR OF SCIENCE
BIOLOGY
Suggested Order of Study**

MAJOR CODE 65

1st Semester		FRESHMAN		2nd Semester	
Course	Hours	Course		Hours	
Bio 101 Gen Biology	4	Bio 122 Zoo. Survey (Bio 101)		3	
Eng 101 Comp.	3	Math 140 Coll Algebra & Trig		5	
HPER 101 Phys Activities or equiv	2	Eng 102 Comp. (Eng 101)		3	
Gen Ed [Speech, Soc Sci, Humanities, Fine Arts]	6	Gen Ed [Speech, Soc Sci, Humanities, Fine Arts]		6	
Psy 120 Freshman Orientation	1				17
	16				
SOPHOMORE					
Bio 112 Bot Survey (Bio 101)	3	Bio 211 Micro (Bio 101) OR *Bio 231 (Med Micro, Chem 101 & Bio 101)		5	
Bio 305 Genetics (Bio 101)	4	Bio 210 Gen Phys (Bio 101, 112, 122)		4	
Chem 101 Gen Chem (Math 140)	5	Gen Ed [Speech, Soc Sci, Humanities, P.E.]			
Gen Ed [Speech, Soc Sci, Humanities, PE]	2-3				2-3
	14-15				11-12

*Offered Fall Semester

() Prerequisite

[] Departmental Recommendations

SUGGESTED ORDER OF STUDY

DEPARTMENTAL REQUIREMENTS

Must take **one** course from **each** Bio Group

A Botany	B Zoology	C Ecology
Bio 316 (Bio 101)	Bio 331 (Bio 101 & 122)	Bio 312 (Phys 100, Bio 101 and Math 110)
Bio 322 (Bio 101 & 112)	Bio 442 (Bio 122)	Bio 402 (Bio 101, 112, & 322)
Bio 414 (Bio 112)	Bio 462 (Bio 122 &/or 331)	

Required Biology Courses

Bio 101	4
Bio 112	3
Bio 122	3
Bio 210	3
Bio 211 or 321	5
Bio 305	4
Bio 490	1
Bio _____	
Bio _____	
Bio _____	
Total	40

Supporting Courses in Sci & Math

Required
Math 140
Phys 151
Chem 101
Chem 102
Chem 300 or 301
Chem _____

For Additional Information Contact:

Botany	Dr. E. Sam Gibson	S-308D	Phone: 226
Fish & Wildlife	Dr. O.E. Orr	S-308B	226
Forestry, Ecology, Entomology	Dr. Jim Jackson	S-308A	226
Ocean & Marine	Mr. Wayne Stebbins	S-308E	226
Genetics, Microbiology	Dr. William Ferron	S-216	238

BACHELOR OF SCIENCE IN EDUCATION

BIOLOGY MAJOR

Option B-Single Teaching Field Suggested Order of Study

MAJOR CODE 21

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Bio 101 Gen Biology	4	Bio 102 Zoo Survey (Bio 101)	3
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Psy 110 Human Growth and Devel.	5	Math 140 Algebra and Trig	5
Psy 120 Freshman Orientation	1	Gen Educ [Speech, Hist, PSc, Humanities]	
Gen Educ [Speech, Hist, PSc, Humanities]	3	Humanities, Fine Arts]	
	16		2
			13

SOPHOMORE

Bio 112 Botanical Survey (Bio 101)	3	Bio 211 Micro. (Bio 101, Chem 101)	5
Chem 101 Gen Chem I (Math 130)	5	Bio 305 Genetics (Bio 101)	4
Phys or Geology	5	Chem 102 Gen Chem (Chem 101)	3
Gen Educ [Speech, Hist, PSc, Humanities, Fine Arts, PE]	3	Gen Ed [Speech, Hist, PSc, Humanities, Fine Arts, PE]	3
	16	—Make application to Teacher Educ. 226 Educ-Psych Bldg.	

15

SUGGESTED ORDER OF STUDY

JUNIOR			
Chem 301 Organic Chem (Chem 102)	5	**Bio 402 Gen Ecol (Bio 101, 112 322 or Consent)	4
Psy 310 Ed Psy (Psy 5 hrs)	3	Psy 302 Exceptional Child (Psy 110)	2
Educ 330 Struc Teach Sec	2	Biology Electives	5
Educ 331 Video Teaching Lab	1	Gen Educ [Speech, Hist, PSc, Humanities, Fine Arts, PE]	
Gen Educ [Speech, Hist, PSc, Humanities, Fine Arts, PE]	3	Humanities, Fine Arts, PE]	3
	<u>14</u>		<u>14</u>
SENIOR			
		Professional Semester	16
Bio 306 Human Physio and Anatomy (Bio 122)	5		<u>16</u>
Gen Educ Elective (No Bio)	3		
Biology Electives	5		
Elective	3		
—Make application for graduation			
100 Hearnes Hall			
	<u>16</u>		

*Offered Fall Semester Only

**Offered Spring Semester Only

() Prerequisite

[] Dept recommendation-not necessarily in this order

For Additional Information Contact:
Dr. William L. Feron
Office: S-216
Phone: 239

BACHELOR OF SCIENCE IN EDUCATION BUSINESS EDUCATION Plan B-Single Teaching Field Suggested Order of Study

MAJOR CODE 23

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Hist 110 U.S. History 1492-1877	3	PSc 120 Govt: National, State, Local	3
Gen Ed [Fine Arts]	3	Gen Ed [Speech]	3
Psy 110 Psy of Human Development	5	Gen Ed [Humanities or Fine Arts]	3
HPER 101 Intro to Physical Act I	2	Math 110 Intro to College Math OR	
Psy 120 Freshman Orientation	1	Math 130 College Algebra	3
	<u>17</u>		<u>15</u>
SOPHOMORE			
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3
Acct 101 Elem Accounting I	3	Acct 102 Elem Accounting II	3
Gen Ed [Bio 100]	4	GB 121 Office Machines	3
Gen Ed [Humanities or Fine Arts]	3	Gen Ed Phys 100	5
HPER 160 Personal Health	2	Elective [Comp 100]	3
Ed 200 Expl Field Exp	1		
	<u>16</u>		<u>17</u>

SUGGESTED ORDER OF STUDY

JUNIOR

Acct 212 Intermediate Accounting I OR Acct 310 Cost Accounting OR Acct 401 Tax Accounting OR Acct 498 Seminar in Managerial Accounting	3	GB 302 Business Law II [GB 320 Business Communications] OA 102 Intermediate Typewriting OA Shorthand or a Business Elective Psy 310 Educational Psychology	3
GB 301 Business Law I	3		
OA Shorthand or a Business Elective	3		
MM 350 Principles of Management OR MM 300 Principles of Marketing	3		
OA 200 Advanced Typewriting	3		
	<u>15</u>		<u>15</u>

SENIOR

Electives No. 300 or above [Business and Computer courses recommended]	12	Professional Semester —Registration for National Teacher Examination	16
Ed 330 Structure of Teaching-Sec	2		
Ed 331 Video Teaching Lab	1		
Psy 302 Exceptional Child	2		
—Apply for graduation 100 Hearnes Hall			
	<u>17</u>		<u>16</u>

For Additional Information Contact:
Dr. H. Turner
Office: 190 Business Building
Phone: 249

() Prerequisite

[] Dept Recommendation

Plan A - Business Education as one of two teaching fields requires the following 30 credit hours: Acct 101, 102, 212 OR 310 OR 401, Econ 201, 202, Office Administration Typing 6 hours, Shorthand 6 hours, Upper Division elective in business 3 hours.

BACHELOR OF ARTS DEGREE CHEMISTRY MAJOR Suggested Order of Study

MAJOR CODE 51

1st Semester

Course	Hours
Chem 101 Gen Chem I (Alg & Trig)	5
Math 140 Alg & Trig OR (Math 150 Calculus I)	5
Eng 101 Composition	3
Phy 120 Freshman Orientation	1
	<u>14</u>

FRESHMAN

2nd Semester

Course	Hours
Chem 102 Gen Chem II (Chem 101)	3
Qualitative Ana Chem 162 (Chem 101)	3
Eng 102 Composition (Eng 101)	3
Gen Ed [HPER 101 Phys Act or equiv]	2
Electives (Second area of Concentration)	5
	<u>16</u>

SOPHOMORE

*Chem 301 Organic Chem I OR Chem 201 Analytical Chem I Phys 151 Elem College Phys I (Math 140) Gen Ed [HPER 160 Per Hlth or equiv] Electives (Second area of Concentration)	5	*Chem 302 Organic Chem II OR Chem 300 Intro to Mod Org Chem Phys 152 Elem College Phys II (Phy 151) Gen Ed [PSc 120 Govt: Nat'l, St, Loc] Electives (Second area of Concentration)	5
	2		3
	<u>5</u>		<u>5</u>
	<u>17</u>		<u>18</u>

SUGGESTED ORDER OF STUDY

JUNIOR			
Chem 201 Analytical Chem I (Chem Elective Upper Division)	5 (4)	Chem Elective (Upper Division) Foreign Language	4 5
Foreign Language	5	Gen Ed [Behav & Soc Science]	3
Gen Ed [Speech]	3	Gen Ed [Bio 101 Gen Bio]	4
Gen Ed [Literature]	3		
		<u>15-16</u>	16

SENIOR	
Gen Ed [Humanities & Fine Arts]	3
Gen Ed Elective	3
Electives	10
—Apply for graduation 100 Hearnes Hall	

*Student may elect either Chem 300 plus 4 hours of upper division Chemistry electives (excluding Chem 301) or Chem 301 and Chem 302.

() Prerequisites

[] Dept Recommendation

For Additional Information Contact:
Dr. Phillip R. Whittle
Office: S-222 or PA-C
Phone: 241/219
OR
Dr. Vernon Biamonte
Office: S-218
Phone: 241

**BACHELOR OF SCIENCE
CHEMISTRY MAJOR**
Suggested Order of Study

MAJOR CODE 66

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Chem 101 Gen Chem I (Alg & Trig)	5	Chem 101 Gen Chem II (Chem 101)	3
Math 150 Calculus I	5	Chem 162 Qual Analysis (Chem 101)	3
Eng 101 Composition	3	Math 250 Calculus II (Math 150)	5
Gen Ed [Hist 110 or 120 U.S. Hist]	3	Eng 102 Composition (Eng 101)	3
Psy 120 Freshman Orientation	1	HPER 101 Phys Act or equiv	2
	<u>17</u>		<u>16</u>
 SOPHOMORE			
Chem 301 Organic Chem I (Chem 102)	5	Chem 302 Organic Chem II (Chem 301)	5
Phys 250 Gen Physics I (Math 150)	5	Phys 260 Gen Physics II (Phys 250)	5
**Math 260 Calculus III (Math 250)	5	**Math 322 Differential equations (Math 260)	3
HPER 160 Personal Health or equiv	2	Gen Ed [PSC 120 Govt: Nat'l, State, Local]	3
	<u>17</u>		<u>16</u>

SUGGESTED ORDER OF STUDY

Chem 401 Phys Chem I OR
**Chem 422 Adv Inorganic Chem
Chem 201 Analytical Chem I
Gen Ed [Speech]
Gen Ed [Behav & Soc Sci]
Gen Ed [Literature]

JUNIOR	
4	**Chem 402 Phsyical Chem OR **Chem 472 Organic Qual Analy
5	**Chem 421 Analytical Chem II
3	Gen Ed [Humanities & Fine Arts]
3	Gen Ed [Bio 101 Gen Bio]
3	—Talk with advisor about career opportunity and graduate school
18	

Chem 401 Phys Chem I OR
**Chem 422 Adv Inorganic Chem
**Phys 301 Modern Physics
**Chem 490 Independent Study
Gen Ed [Humanities & Fine Arts]
Gen Ed Elective
—Apply for graduation 100 Hearnes Hall

SENIOR	**Chem 402 Phys Chem OR **Chem 472 Organic Qual Analysis **Chem 490 Independent Study **Phys 372 Electronic Circuits Electives (Upper Division)	4 4 4 4 3
4	**Chem 472 Organic Qual Analysis	4
4	**Chem 490 Independent Study	2
1	**Phys 372 Electronic Circuits	4
3	Electives (Upper Division)	4
3		14

****Suggested elective (not strict requirements)**
 Prerequisites
 Dept Recommendations

For Additional Information Contact:
Dr. L.R. Albright Dr. Vernon Baiamonte
Office S-222 OR Office: 2-218
Phone: 241 Phone: 241

**BACHELOR OF SCIENCE IN EDUCATION
CHEMISTRY MAJOR
Suggested Order of Study**

MAJOR CODE 22

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Chem 101 Gen Chem I (Alg & Trig)	5	Chem 102 Gen Chem II (Chem 101)	3
Math 150 Calculus I	5	Chem 162 Qual Anal (Chem 102)	3
Hist 110 or 120 U.S. History	3	Math 250 Calculus II (Math 150)	5
Psy 120 Freshman Orientation	1	Eng 102 Composition (Eng 101)	3
Eng 101 Composition	<u>3</u>	HPER 101 Phys Act or equiv	<u>2</u>
	17		16

*Chem 301 Org Chem I (Chem 102)
Phys 250 Gen Phys I (Math 150)
+Math 260 Calculus III (Math 250)
HPER 160 Personal Hlth or equiv

SOPHOMORE	
5	**Chem 302 Org Chem II (Chem 301)
5	+Phys 260 Gen Phys II (Phys 250)
5	Psy 110 Psy of Human Devel
2	PSc 120 Govt: Nat'l, St, & Local
17	—Apply for teacher education program

Chem 401 Phys Chem I OR
Chem 422 Advance Inorg Chem
Chem 201 Analytical Chem
Gen Ed [Speech]
Psy 310 Ed Psy (Psy 110)
Gen Ed [literature]

JUNIOR		
4	Chem Elective (Upper Division)	4
5	Gen Ed [Humanities & Fine Arts]	3
5	Gen Ed [Bio 101 Gen Bio]	4
3	Educ 330 Struc of Teaching Sec	2
3	Educ 331 Video Teaching Lab	1
3		14
18		

SUGGESTED ORDER OF STUDY

SENIOR		
Chem 401 Phys Chem I OR +Chem 422 Adv Inorg Chem	4	Educ 462 Stu Teaching Sec 6 Educ 432 Critical Issues in Ed 2-3
Gen Ed [Humanities & Fine Arts]	3	Educ 402 Phil & Hist of Educ 2-3
Gen Ed Elective	3	Educ 370 Intro to Instruc Media 2
Electives	3	Educ 333 Teach Sci in Sec Sch 2
Psy 302 Except Child (Psy 110)	3	Psy 412, Psy 451, or Educ 412
—Apply for graduation 100 Hearnes Hall		—Register for Nat'l Teaching Exam 226 Educ-Psych Bldg
	16	14-16

+Suggested elective (not strict requirements)

*Offered Fall Semester Only

**Offered Spring Semester Only

For Additional Information Contact:
Dr. Vernon Baiamonte
Office: S-218
Phone: 241
OR
Dr. L.R. Albright
Office: S-222
Phone: 241

ASSOCIATE OF SCIENCE COMPUTING ANALYSIS MAJOR Suggested Order of Study

MAJOR CODE 113

1st Semester		FIRST YEAR	
Course	Hours	Course	Hours
Comp 120 Intro to Prog	3	Comp 230 Adv Prog (Comp 120)	3
Eng 101 Composition	3	Comp 240 Comp Applications (Comp 120)	3
Math 150 Calculus & Analytical Geometry I	5	Math 250 Calculus & Analytical Geometry II	5
Gen Educ [Psy 100 or Soc 110]	3	Phys 250 General Physics I (Math 150)	5
Gen Educ [PSc 120 or Hist 110]	3	HPER 101 Physical Activity	2
Phy 120 Freshman Orientation	1		
	18		18

SECOND YEAR	
Comp 250 Principles of Dig Comp	3
Math 260 Calculus & Analytical Geometry III	5
Phys 260 Gen Physics	5
Phys 312 Statics	3
	16
Comp 220 Meth & Sim Tech	3
Math 322 Differential Equations	3
Math 431 Numerical Analysis	3
Math 361 Intro to Probability	3
SP 100 Speech Techniques	3
Gen Educ [Fine Arts or Lit]	3
	18

() Prerequisite

[] Dept. Recommendation

For Additional Information Contact:
Mr. John Cragin
Office: 209 Kuhn Hall
Phone: 224

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
COMPUTER PROGRAMMING MAJOR
Suggested Order of Study**

MAJOR CODE 111

1st Semester	FIRST YEAR	2nd Semester	
Course	Hours	Course	Hours
Comp 100 Intro to Data Processing	3	Comp 120 Intro to Prog	3
Comp 110 Key-Punch Operation	3	PSc 120 Government: Nat'l, State, Local	3
Eng 101 Composition	3	GB 320 Business Communications	3
Math 131 Finite Math	3	Acct 102 Elem Accounting II (Acct 101)	3
Acct 101 Elem Accounting I	3	Sp 100 Speech Techniques	3
Psy 120 Freshman Orientation	1	HPER 101 Intro to Physical Activities I	2
	16		17
SECOND YEAR			
Comp 230 Advanced Programming (Comp 120)	3	Comp 250 Principles of Dig Machines	3
Comp 240 Computer Applications	3	Comp 300 Systems Analysis and Design	3
Phys 100 Fundamentals of Physical Science	5	Econ 202 Principles of Economics	3
Acct 211 Cost Accounting (or Acct 212)	3	GB 321 Statistics (Math 131)	3
Econ 201 Principles of Economics	3	Psy 100 General Psychology	3
	17	Gen Educ [Lit or Fine Arts]	3
			18

() Prerequisite

[] Dept Recommendation

For Additional Information Contact:
Mr. Jim Gray
Office: 209 Kuhn Hall
Phone: 224



SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE
CRIMINAL JUSTICE ADMINISTRATION
Suggested Order of Study**

MAJOR CODE 75

1st Semester	FRESHMAN	2nd Semester
--------------	----------	--------------

Course	Hours	Course	Hours
LE 100 Intro to Law Enforcement	3	LE 150 Interviews & Report	2
LE 110 Police Org & Admin	2	Math 110 Intro to Coll Math	3
Hist 110 U.S. Hist 1492-1877	3	Pol. Sc. 120 Gov't U.S. State, Local	3
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Psy 101 Gen Psych	3	Speech 100 Speech Techniques	3
HPER 101 Intro PE Activity	2	HPER 160 Personal Health	2
Psy 120 Freshman Orientation	1		
	17		16

() Prerequisites

GENERAL EDUCATION (46)	
Eng 101 Composition	3
Eng 102 Composition (Eng 111 satisfies Eng 101 & 102)	3
Speech	3
Sp 100 Speech Techniques	
Sp 131 Voice and Articulation	
SP 302 Business & Professional	
Mathematics 110 or above (write in)	3
HPER 101 P.E. Activity	2
HPER 160 Personal Health or equiv	2
Literature—any level qualified	3
Fine Arts	6
Check two:	
Art	
Drama	
Foreign Language (beyond degree requirement)	
Literature	
Music	
Philosophy (write in)	
Biological Science	4
Physical Science	5
Hist 110 or 120	3
PSc 120 U.S. State & Local Gov't	3
Behavioral and Social Sciences	3
Check one:	
Psychology	
Sociology	
Economics	
History	
Political Science	
Geography (write in)	
Elective outside major area (write in)	3

CJA Courses (22)	
LE 100 Intro to Law Enf.	3
LE 250 Criminal Law	3
LE 150 Interviews and Rep. Wri	2
LE 110 Police Org. & Adm.	2
LE 210 Criminal Procedures	3
CJAd 490 Internship	6
LE 290 Pol. Sup. & Mgmt.	3
	22

Additional CJAd Courses (11)	
CJAd 210 Basic Photography	3
CJAd 330 Probation and Parole	2
CJAd 300 Criminal Invest. II	3
CJAd 310 Traffic Accid. Invest.	3
CJAd 450 Criminal Evidence	3
CJAd 410 Juvenile Procedures	3
CJAd 498 Seminar in Crim. Just.	3
CJAd 499 Independent Study	1-3
	21-23

Required Courses from Supportive	
Political Science (Upper Div.)	3
Sociology (other than Intro)	3
	3
Soc 351 Criminology	3
Soc 391 Pen. & Corr.	3
Psychology (Upper Div.)	3
	3
Psy 432 Abnormal Psy.	3
	24

Elective Courses Selected with Advisor Approval 21

For Additional Information Contact:
Don Seneker
Police Academy
Phone: (417) 624-8100 Ext. 219

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
ELECTRONIC DATA PROCESSING COORDINATION
Suggested Order of Study**

MAJOR CODE 112

1st Semester		FIRST YEAR	
Course	Hours	Course	Hours
Comp 100 Intro to Data Processing	3	Comp 100 Key-Punch & EAM Operation	3
Acct 101 Elem Accounting I	3	Acct 102 Elem Accounting II (Acct 101)	3
GB 101 Introduction to Business	3	OA 102 Intermediate Typewriting	3
Eng 101 Composition	3	PA 120 Intermediate Shorthand	3
Math 131 Finite Math	3	Gen Educ [PSc 120 Government: Nat'l, St. Local or Hist 110]	3
Psy 120 Freshman Orientation	1	HPER 101 Intro to Physical Activities	2
	<u>16</u>		<u>17</u>
SECOND YEAR			
Comp 120 Intro to Programming	3	Comp 230 Advanced Programming	3
GB 321 Statistics (Math 131)	3	GB 320 Business Communications	3
OA 200 Advanced Typewriting	3	GB 121 Office Machines	3
Econ 201 Principles of Economics	3	Sp 100 Speech Techniques	3
Psy 100 General Psy or Soc 110	3	Gen Educ [Science]	4-5
Gen Educ [Literature or Fine Arts]	3		<u>16-17</u>
	<u>18</u>		

() Prerequisite
 Dept Recommendation

For Additional Information Contact:
 Mr. Jim Gray
 Office: 209 Kuhn Hall
 Phone: 224

**DATA PROCESSING CERTIFICATE
Required Order of Study**

MAJOR CODE 160

1st Semester		One-Year Schedule	
Course	Hours	Course	Hours
Comp 120 Intro to Programming	3	Comp 230 Computer Applications (Comp 120)	3
Comp 100 Intro to Data Processing	3	GB 101 Intro to Business	3
Comp 110 Keypunch & EAM Operations	3	GB 320 Business Statistics (Math 130 or 131)	3
Acct 101 Elementary Accounting	3	Eng 101 Composition	3
Math 130 College Algebra OR [Math 131 Finite Math]	3	Sp 100 Speech Techniques	3
	<u>15</u>		<u>15</u>

() Prerequisite
 Dept Recommendation

For Additional Information Contact:
 Mr. Jim Gray
 Office: 209 Kuhn Hall
 Phone: 224

SUGGESTED ORDER OF STUDY

DENTAL ASSISTING CERTIFICATE One-Year Schedule Required Order of Study

MAJOR CODE 145

Students must apply for admission and be accepted into the Dental Assisting program before they may enroll in DA 100, 120, 130, 140, 150, 160, 180, and 190. Applications for the Dental Assisting Program may be obtained from the Dental Technology Office in the Technology Building.

1st Semester

Course	Hours
DA 100 Dental Science I	3
DA 120 Dental Lab Procedures I	3
DA 130 Dental Orientation	2
DA 140 Dental Operative Procedure	5
DH 160 Dental Radiology	2
Eng 101 Composition	3
	<u>18</u>

2nd Semester

Course	Hours
DA 150 Dental Science II	3
DA 160 Dental Lab Procedure II	3
DA 170 Dental Secretarial Procedure	3
DA 180 Dental Specialities	3
DA 190 Clinical Dental Assistant	5
Psy 100 Gen Psy	3
	<u>20</u>

Total Accumulated Hours 38

For Additional Information Contact:
Mrs. Mary Ann Gremling
Office: 102 Technology Bldg.
Phone: 279

ASSOCIATE OF SCIENCE DEGREE DENTAL HYGIENE Suggested Order of Study

MAJOR CODE 124

Students must apply for admission and be accepted into the Dental Hygiene Program before they may enroll in DH 140, DH 150, 160, 200, 210, 220, 290, 310, 330, 390, 100, 190, and 320. Applications for the DENTAL HYGIENE PROGRAM may be obtained from the Dental Hygiene office in the Technical Building.

1st Semester

Course	Hours
DH 140 Dental Morphology	1
DH 150 Embryology, Histology	3
Eng 101 Composition	3
Chem 100 Intro Chemistry	5
Bio 221 Human Anatomy & Phys	5
Psy 120 Freshman Orientation	1
	<u>18</u>

FIRST YEAR

Course	Hours
DH 100 Fund of Dental Hygiene	5
DH 220 Dental Materials	3
DH 310 Nutrition	2
DH 160 Dental Radiology	2
Psy 110 Psy of Human Development	5
	<u>17</u>

SUMMER

DH 190 Clinical Dental Hygiene	3
SP 100 Speech Techniques	3
Bio 231 Fund of Medical Microbiology	5
	<u>11</u>

SUGGESTED ORDER OF STUDY

SECOND YEAR		
DH 200 Dental Health Education	3	DH 330 Ethics & Community Dentistry
DH 210 Perio-Pathology	3	DH 390 Clinical Dental Hygiene III
DH 290 Clinical Dental Hygiene II	5	Soc 110 Intro to Sociology
Gen Ed (Fine Arts or Lit)	3	Gen Ed (Hist 110 or PSc 120)
DH 320 Pharmacology	2	HPER 101 Intro to Physical Activity
	<u>16</u>	
		16

() Prerequisite

[] Dept Recommendation

For Additional Information Contact:
 Mrs. Mary Ann Gremling
 Office: 102 Technical Bldg.
 Phone: 279

PRE-DENTISTRY

Please see the outline of pre-professional courses listed on page 163.

ASSOCIATE OF SCIENCE DRAFTING AND DESIGN MAJOR Suggested Order of Study

MAJOR CODE 116

1st Semester		FIRST YEAR	
Course	Hours	Course	Hours
Draf 110 Intro Drafting	3	Draf 120 Descriptive Geometry	
Mach 100 Intro Mach Tool Proc	5	(Draf 110)	3
Psy 100 General Psychology	3	Draf 130 Machine Drafting (Draf 110)	3
Math 30 Intermediate Algebra OR Math 130 College Algebra	3	Gen Ed [Sp 100 or Sp 131]	3
Psy 120 Freshman Orientation	1	Eng 101 Composition	3
HPER 101 Intro to Phys Activity	<u>2</u>	Gen Ed [Lit or Fine Art]	3
	<u>17</u>		15

SECOND YEAR

Draf 200 Machine Design	3	Draf 210 Production Illustration	3
Draf 240 Mapping and Survey	3	Draf 220 Architectural Drafting	3
Math 112 Trigonometry	3	Geol 110 Intro to Geology	5
Comp 100 Intro to Data Proc	3	Gen Educ [PSc 120 or Hist 110]	3
Gen Educ [Soc 121 Family]	<u>3</u>	Elective	3
	<u>15</u>		17

For Additional Information Contact:
 Dr. Jerry Coburn
 Office: 115 Technical Bldg.
 Phone: 279

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE
BUSINESS ADMINISTRATION
Economics and Finance Major
Suggested Order of Study**

MAJOR CODE 73

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
GB 101 Intro to Business	3	Eng 102 Composition (Eng 101)	3
Eng 101 Composition	3	Hist 110 or 120 U.S. History	3
HPER 101 Intro to Physical Activities	2	Math 131 Finite Math	3
PSC 120 U.S. State & Local Government	3	Gen Ed [Fine Arts]	3
Comp 100 Intro to Data Processing	3	Gen Ed Speech	3
Psy 120 Freshman Orientation	1		
	15		

SOPHOMORE

Acct 101 Elem Accounting I	3	Acct 102 Elem Accounting II	3
Econ 201 Principles of Economics I	3	Econ 202 Principles of Economics II	3
Gen Ed [Bio 100 or equiv]	4-5	Gen Ed [Phy 100 or equiv]	5
Gen Ed [Humanities]	3	GB 320 Business Communications	3
HPER 160 Personal Health or two hours activities	2	Gen Ed [Humanities-Fine Arts]	3
	15-16		17

JUNIOR

Econ 300 Money and Banking	3	Econ 350 Financial Management	3
GB 301 Business Law I	3	Econ 302 Econ Growth & Dev	3
GB 321 Bus Statistics (Math 131)	3	GB 337 Managerial Data Processing	3
MM 300 Principles of Marketing	3	Required Business Elective	3
MM 350 Principles of Management	3	Choose one from: GB 302 [GB 322], MM 441, Acct 498 Sem. in Managerial Accounting	
	15	Econ 498 Seminar or elective	3
			15

SENIOR

Econ 401 Microeconomic Analysis	3	MM 452 Business Policy	3
Econ 411 Investments	3	Econ 402 Macroeconomic Analysis	3
Hist 331 Economic History OR Econ Elective	3	Econ 412 Urban & Regional Econ	3
Electives	6	Electives	6
	15		15

—Apply for graduation 100 Hearnes Hall

() Prerequisites

[] Dept Recommendation

For Additional Information Contact:
Dr. Julio Leon
Office: 117 Business Bldg.
Phone: 249

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE
IN EDUCATION
ELEMENTARY EDUCATION
Suggested Order of Study**

**MAJOR CODE IS IN THE
SUPPORTING AREA ON
REVERSE SIDE**

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Psy 110 Human Development	5	Eng 102 Comp (Eng 101)	3
Eng 101 Composition	3	Hist 110 or 120 U.S. History	3
Hist 110 or 120 U.S. History	3	Gen Ed [Fine Arts]	3
Math 111 Math for Elem Teach I	3	Math 120 Math for Elem Teach II	3
HPER 101 Intro to PE Activity	2	PSc 120 Gov't: U.S., St & Local	3
Psy 120 Freshman Orientation	1		
	<u>17</u>		

() Prerequisites

[] Dept Recommendation

GENERAL EDUCATION REQUIREMENTS

Bio 101 Gen. Biology	4
Math 111 Math for Elem. Teach	3
Phys 100 Intro to Phy. Sci.	5
Eng 101 Composition	3
Eng 102 Composition or Eng. 111	3
Literature Elective	3
Literature Elective	3
Spch 100, 131, or Spch 302	3
Hist 110 U.S. History	3
PSs 120 Gov't	3
Mus 110 or Art 110, Phil. 201, Theatre 110	3
HPER 101 P.E.	2
HPER 370 Sch. & Com. Health	3

ADDITIONAL REQUIRED FOR CERTIFICATION ELEMENTARY ED

Psy 110 Hum. Develop or Psy 100 Gen Psy & Psy 300 Child Psy.	5-6
Bio 310 Field Bio. or Bio Elec.	2
Math 120 Math for Elem. Teach	3
Eng 315 or Eng 301 Mod. Grammar	3
Hist 120 U.S. History	3
Geog 211 Reg. & Nations or Geography Elective	3
	60-61

**REQUIRED AREA OF CONCENTRATION
(minor) 21-35 hours**

See other side for SUPPORTING AREAS

*Application of Adm. to Teacher Education must be filed before taking Educ. 320.

DEPARTMENTAL REQUIREMENTS

Ed 200 Exp. Field Exper.	1
Eng 325 Child Lit	3
Art 220 Art Educ.	3
Mus 332 Mus. Elem. Sch.	3
Psy 302 Except Child	2
HPER 311 PE Elem. Sch.	2
Ed 311 Sci. Elem. Sch.	2
Ed 312 Prob. in Arith	2
Ed 340 Lang. Arts & Read.	5
Ed 470 Rem. Reading	2
Select one: Ed 420 Counseling Ed. 421 Career & Occup. Ed., Ed 324 Intro. to Spec. Ed., Ed 435 Ind. Instruction, Ed. 407 Diagnostic Tch. Tech.	
	2-3
	27-28

PROFESSIONAL EDUCATION

Psy 310 Ed. Psychology	3
*Ed. 320 Structure of Tch.	2
Ed. 321 Video Teach. Lab	1
Ed. 402 Hist. & Phil	2-3
Ed. 432 Critical Issues in Educ.	2-3
Ed. 322 Tch. Soc. Sci. Elem. Sch.	2-3
Ed. 370 Inst. Media	2-3
Psy 412, Ed. 420, Ed. 412	2-3
Ed. 442 Student Teaching	5-6
	21-27

Total Professional Ed. (Kansas Req. 24)

Electives

**GRAND TOTAL REQUIRED FOR
BS.E.**

124 hrs.

For Additional Information Contact:

Dr. Robert C. Wiley
Office: 208 Sci Bldg.
Phone: 225

SUGGESTED ORDER OF STUDY

AREA OF CONCENTRATION REQUIREMENTS FOR SPECIAL EDUCATION AND WHEN CERTIFICATION FOR GRADES 7, 8, 9 IS DESIRED

ART	MAJOR CODE 10	SCIENCE 7-8-9	MAJOR CODE 12
1. Design	6	1. Chemistry	4-5
2. Painting and Drawing	6	2. Physics	4-5
3. Elective Art Credit	7	3. Biology	8-10
4. Art Education (for Elem Sch)	2	4. Earth Science (Geology)	4-5
Total	21	Total	21
ENGLISH	MAJOR CODE 13	SOCIAL STUDIES	MAJOR CODE 16
1. Composition, Rhetoric, Grammer, Linguistics, etc. (To include a course in Advanced Comp)	9	1. American History	6
2. American Literature	6	2. European History (or World History)	6
3. English Lit and/or World Lit	6	3. US and/or State Government	3
4. Problems of Teaching Reading in Sec School	2	4. Economics	3
Total	23	5. Geography	3
		6. Electives (Soc Studies)	
		Total	21
SPEECH AND DRAMATICS	MAJOR CODE 47	HEALTH AND PHYSICAL EDUCATION	MAJOR CODE 17
1. Composition, Rhetoric Gram- mer (To include a course in Adv Composition)	9	1. Health Ed, First Aid, Anatomy & Physiology, Kinesiology, etc.	8
2. Speech and Dramatics	12	2. Fund of PE	4
3. Electives English and Speech		3. Surv of Sports or Coaching Courses	3-4
Total	21	4. PE Elem School	2
		5. Elective Courses in Rhythms and/or Games	3-4
		Total	21
TEACHER OF SPECIAL EDUCATION	MAJOR CODE 18	MATHEMATICS	MAJOR CODE 14
(Elem or Sec)†		Any Math Courses above Intermediate	
*1. Except Child (Psy 302)	2	Total	21
*2. Methods of Teach EMR (Ed 351)	3		
*3. Meth of Teach Em Dist (Ed 360)	3		
*4. Meth of Tech L.D. (Ed 352)	3		
*5. Remed & Diag Reading (Ed 492)	2		
*6. Spch Corr Prob (Sp 492)	3		
*7. Student Teaching Spec Educ (Ed 444)	6 (22)		
Select 9 hrs from the following:			
Counseling (Ed 420) or Arts & Crafts			
Pers Adj, Abnormal Psy, Practicum			
in Spec Ed) Sensation (Psy 411)			
Sociology, Individual Testing (Psy 471)			
Motor Learn (HPER 340), or other			
related course work approved by			
Dept Head			
Total	31	Total	28

*Required Courses

†Must also complete, if not already taken: Ed 340 L.A. & Reading, Ed 312 Prob. of Arith, Child or Adoles Psy, Psy 412 Meas & Eval A **minimum of 6 hrs St** **Teaching in a Special Education setting** and must earn teaching certification in an additional field.

**Areas also available in straight vocal or instrumental music of 24 hrs each.

REMEDIAL READING	TEACHER†	MAJOR CODE 09
1. Ed 340 Lang Arts & Reading		5
2. Ed 492 Dia & Remedial Teaching		2
3. Psy 471 Invididual Testing		3
4. Practicums in Dia & Remed of Read- ing Problems (Ed 471 & Ed 472)		6
Total		16

SUGGESTED ORDER OF STUDY

PRE-ENGINEERING

MAJOR CODE 133

The first two years of pre-engineering courses are outlined in "A Model Program for Engineering Transfers." This publication is written specifically for those students transferring to the University of Missouri-Rolla after two years. However, most engineering programs are standard for the first two years. If a student wishes to transfer to a school other than Rolla, it is suggested that he review the catalog of that school for any differences in their program and the UMR outline. College catalogs are available in the Reserve area of the MSSC Library.

Any advisors that desire a copy of the booklet should contact the Math or Physical Science Department.

	Aerospace	Ceramic	Chemical	Civil	Electrical	Engr Mgmt	Engr Mechanics	Geological Engr	Mechanical	Metallurgical	Mining Engr	Nuclear Engr	Petroleum
FIRST SEMESTER													
Engl 101 Composition	x	x	x	x	x	x	x	x	x	x	x	x	x
Math 150 Calc I	x	x	x	x	x	x	x	x	x	x	x	x	x
Hist 110 U.S. History	x	x	x	x	x	x	x	x	x	x	x	x	x
Chem 101 Gen Chem I (Math 140)	x	x	x	x	x	x	x	x	x	x	x	x	x
SECOND SEMESTER													
Math 250 Calc II (Math 150)	x	x	x	x	x	x	x	x	x	x	x	x	x
Phys 250 Gen Phys I (Math 150)	x	x	x	x	x	x	x	x	x	x	x	x	x
Econ 201 Econ (Macro)	x	x	x	x	x	x	x		x		x		x
Chem 102 Gen Chem II (Chem 101)		x	x					x		x	x	x	x
Draft 110 Intro Draft	x			x	x	x	x	x	x	x			x

() Prerequisites

Second year courses selected in conjunction with a pre-engineering advisor.

For Further Information Contact:
Mr. Rochelle Boehning
Office: 206 Science-Math Bldg
Phone: 240
OR
Dr. Russell Phillips
Office: 226 Science-Math Bldg
Phone: 240

SUGGESTED ORDER OF STUDY

BACHELOR OF ARTS
ENGLISH
Suggested Order of Study

MAJOR CODE 41

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
+Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Gen Ed [Hist 110 or 120]	3	Gen Ed [Pol Sci 120]	3
Foreign Language	5	Foreign Language	5
Gen Ed [Math 110 or equiv]	3	English Elective	3
Psy 120 Freshman Orientation	1	Elective	3
	<u>15</u>		<u>17</u>

+Students who qualify may take Eng. 111 instead of Eng. 101 and Eng. 102.

SOPHOMORE

Eng 271 English Literature	3	Eng 272 English Literature	3
*Eng 216 or Eng 315	3	Eng Elective	3
Gen Ed [Speech]	3	Gen Ed [Psy Sci]	5
Gen Ed [Bio Sci]	4	Gen Ed [Beh Sci]	3
Gen Ed [HPER 160 or equiv]	2	Elective	3
	<u>15</u>		<u>17</u>

JUNIOR

Eng 311	3	Eng 312	3
Eng 301 or **Eng 400	3	Eng Elective	3
English Elective	3	Fine Arts Elective	3
Electives	6	Electives	6
	<u>15</u>		<u>15</u>

SENIOR

English Electives	6	English Electives	6
Electives	9	Electives	9
	<u>15</u>		<u>15</u>

—Apply for graduation 100 Hearnes Hall

English 101, 102, 271, 272 should be completed before the junior year.

*Offered Fall Semesters only

**Offered Spring Semesters only

() Prerequisites

[] Dept Recommendations

For Additional Information Contact:
 Dr. Harry Zuger
 Office: 314 Hearnes Hall
 Phone: 235

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
ENGLISH EDUCATION
Plan B-Single Teaching Field
Suggested Order of Study**

MAJOR CODE 24

1st Semester		FRESHMAN	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Psy 110 Psy of Human Devel	5	Eng 271 English Lit (Eng 101)	3
Gen Ed [Hist 110 or 120 U.S. Hist]	3	Eng Elective [Eng 180]	3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Science]	4-5
HPER 101 Physical Activity	2	Elective	3
Psy 120 Freshman Orientation	1		
	<u>17</u>		<u>16-17</u>
SOPHOMORE			
Eng 272 English Literature	3	Eng 312 American Literature	3
Eng 311 American Literature	3	Eng 301 Modern Grammar OR	
HPER 160 Personal Health	2	Eng 400 Hist of Eng Lang	3
Gen Ed [Science]	4-5	Psy 310 Ed Psychology	3
Elective [Foreign Language] OR		Gen Ed [Find Arts]	3
Fine Arts	3-5	Educ 200 Exploratory Field Exp.	1
	<u>15-18</u>	Elective [Foreign Language]	<u>3-5</u>
			<u>16-18</u>
JUNIOR			
Eng 315 Exposition	3	Eng 319 Comp for Teachers	3
Eng [Area A Elective]	3	Eng 450 Shakespeare OR	
Eng Elective [Eng 330 Literature of Adolescents]	3	Eng 451 Shakspr	3
Gen Ed [Speech]	3	Eng [Area B Elective]	3
Elective	3	Ed 330 Structure of Teaching	2
Ed 422 Teaching Read in Sec Sch	2	Ed 331 Video Teaching Lab	1
	<u>17</u>	Gen Ed [Polsc 120-Govt]	<u>3</u>
			<u>15</u>
SENIOR			
Eng [Area C Elective]	3	Professional Semester including methods course for first major	
Eng Elective	3	—Register for National Teachers Exam, 226 Educ-Psych Bldg	16
Psy 302 Exceptional Child	2		
Electives [Methods course for second major]	8		
—Apply for graduation 100 Hearnes Hall			<u>16</u>

Eng 101 is a prerequisite to all English courses except Eng. 180 and Eng. 181. English 102 or 111 is a prerequisite to **all** upper division literature courses. A lower division literature course is prerequisite to **all** upper division literature courses except Eng. 311 and Eng. 312.

Area A

Eng 410 Medieval Eng Lit
Eng 415 lit or Eng Renaissance
Eng 420 17th Cent Eng Lit

Area B

Eng 425 18th Cent Eng Lit
Eng 430 Romantic Period
Eng 435 Victorian Period

Area C

345 American Novel
360 20th Century Drama
370 20th Century Poetry
380 English Novel

For Additional Information Contact:
Dr. Harry Zuger
Office: 314 Hearnes Hall
Phone: 235

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
ENVIRONMENTAL HEALTH
Suggested Order of Study**

MAJOR CODE 123

FIRST YEAR

**Prescribed 48 week course at Water and Wastewater School 30 Hrs.

1st Semester

SECOND YEAR

2nd Semester

Course	Hours	Course	Hours
Chem 101 General Chemistry I	5	Chem 102 General Chemistry II	3
Bio 101 General Biology	4	Bio 312 Environmental Biology	4
Math 140 Algebra and Trig	5	Eng 101 Composition	3
Psy 120 Orientation	1	Gen Ed [Literature or Fine Arts]	3
HPER 101 Physical Education	2	Gen Ed [Hist 110 or PSc 120]	3
	<u>17</u>		<u>16</u>

SUMMER

Gen Ed [Psy 100 or Soc 110]	3
Sp 100 Fundamentals of Speech	<u>3</u>

3
6

For Additional Information Contact:
 Dr. Gerald Elick
 Office: 308A Science Bldg
 Phone: 226

[] Dept Recommendations

**This work may be taken prior to entering MSSC or after completing work on College campus.

**BACHELOR OF SCIENCE
ENVIRONMENTAL HEALTH TECHNOLOGY MAJOR
Suggested Order of Study**

MAJOR CODE 63

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Eng 101 Composition	3	Bio 112 Bot Survey (Biol 101)	3
Math 140 Algebra & Trig	5	Eng 102 Composition	3
Bio 101 Gen Biology	4	Hist 110 U.S. History	3
Psy 100 [Gen Psychology]	3	Art 110 [Intro to Art]	3
HPER 101 Phys Ed	2	HPER 160 Personal Health	2
Psy 120 Freshman Orientation	<u>1</u>	Eng 180 [World Masterpieces]	<u>3</u>
	<u>18</u>		<u>17</u>

SOPHOMORE

Bio 122 Zoo Survey (Bio 101)	3	Chem 102 Gen Chem II (Chem 101)	3
Chem 101 Gen Chem I (Math 140)	5	Chem 162 Qual Analysis	3
Econ 201 Prin Econ	3	Bio 211 Microbiology	5
Speech 100	3	Eng 210 [English Lit]	3
Acct 101 Elem Acct	<u>3</u>	MM 350 Bus Org & Mgmt	<u>3</u>
	<u>17</u>		<u>17</u>

JUNIOR

Chem 201 Analytical Chem I	5	Chem 300 Org & Biochem Chem	5
Bio 431 Animal Phys	5	Giol 300 Earth Environs	4
Bio 306 Human or Phys and Anat	5	Bio 370 Environ Health	4
Bio 312 Environ Biol	4	MM 352 Personnel Mgmt	<u>3</u>
PSc 120 Govt: Nat, St & Local	<u>3</u>		<u>16</u>
	<u>17</u>		

SUGGESTED ORDER OF STUDY

**SENIOR
Option I**

48 Weeks of Study at the Water and Wastewater School. (This work may be taken prior to entering MSSC)

	Option II		
Bio 305 Genetics	4	Eht 450 Practicum	
Bio 332 Entomology	3		
Bio 361 Parasitology	4		
Geol 300 Earth Environ	5		
	<u>16</u>		<u>12</u>

() Prerequisites
 Dept Recommendations

For Additional Information Contact:
 Dr. Gerald Elick
 Office: 308C Sci-Math Bldg
 Phone: 226

**ASSOCIATE OF SCIENCE
GENERAL BUSINESS MAJOR
Suggested Order of Study**

MAJOR CODE 119

1st Semester	FIRST YEAR	2nd Semester
--------------	------------	--------------

Course	Hours	Course	Hours
Acct 101 Elem Accounting I	3	Acct 102 Elem Accounting II (Acct 101)	3
GB 101 Introduction to Business	3	OA 102 Intermediate Typewriting	3
GB 121 Business Machines	3	Gen Ed [Hist 110 or PSc 120]	3
Eng 101 Composition	3	Sp 100 Speech Techniques	3
Math 30 Intermediate Algebra OR Math 110	3	HPER 101, or 102, or 160	2
Psy 120 Freshman Orientation	1	Gen Ed [Lit or Fine Arts]	3
	<u>16</u>		<u>17</u>

SECOND YEAR

GB 320 Business Communications	3	MM 350 Principles of Management	3
GB 301 Business Law I	3	GB 302 Business Law II	3
MM 300 Principles of Marketing	3	Econ 202 Principles of Economics	3
Econ 201 Principles of Economics	3	Gen Ed [Bio 100 or Phys 100]	4-5
Gen Ed [Psy 100 Gen Psychology OR Soc 110]	3	Electives [MM 312-Retailing]	3
	<u>15</u>		<u>17</u>

—Apply for graduation 100 Hearnes Hall

() Prerequisite
 Dept Recommendation

For Additional Information Contact:
 Dr. Julio S. Leon
 Office: 117 Business Bldg
 Phone: 249

Electives must be selected from the business areas of personnel management, advertising, retailing, salesmanship, and business communications. Selections from psychology are also valid.

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN BUSINESS
GENERAL BUSINESS MAJOR
Suggested Order of Study**

MAJOR CODE 71

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
*GB 101 Intro to Business	3	Eng 102 Composition (Eng 101)	3
Eng 101 Composition	3	Gen Ed-Soc Sci [Hist 110 or 120]	3
Comp 100 Intro to Data Processing	3	Math 131 Finite Math	3
HPER 101 Intro to Physical Activities	2	Gen Ed-[Speech]	3
PSc 120 Government: National, State, Local	3	Gen Ed-[Fine Arts]	3
Psy 120 Freshman Orientation	1		
	<u>15</u>		<u>15</u>
SOPHOMORE			
*Acct 101 Elem Accounting I	3	*Econ 202 Principles of Economics	3
*Econ 201 Principles of Economics	3	*GB 320 Business Communications	3
Gen Ed-Science [Bio 101 Gen Bio]	4	*Acct 102 Elem Accounting II (Acct 101)	3
Gen Ed-[Humanities or Fine Arts]	3	Gen Ed-Science [Phy 100]	5
HPER 160 Personal Health	2	Gen Ed [Humanities or Fine Arts]	3
	<u>15</u>		<u>17</u>
JUNIOR			
*GB 301 Business Law I	3	*GB 337 Managerial Data Processing	3
*GB 321 Statistics	3	*Econ 350 Financial Management	3
*MM 300 Principles of Marketing	3	*Required Business Elective	3
Electives	3	Select one from: GB 302, Econ 300, MM 441, GB 322,	
*MM 350 Principles of Management	3	Acct 498-Seminar in Managerial Accounting	
	<u>15</u>	Electives	<u>8</u>
			<u>17</u>
SENIOR			
**Elective in Economics (No. 300 or above) [Econ 412]	3	*MM 452 Business Policy	3
**Elective in Business (No. 300 or above) [MM 352]	3	**Elective in Marketing and Mgmt. (No. 300 or above) [MM 312]	3
Electives (No. 300 or above)	9	**Elective in Gen Bus (No. 300 or above) [GB 411]	3
	<u>15</u>	Electives	<u>6</u>
			<u>15</u>

- *General Requirements in Business
- **Specific Program Requirements in Business
- () Prerequisites
- [] Dept Recommendations

For Additional Information Contact:
Dr. Julio Leon
Office: 117 Business Bldg
Phone: 249

SUGGESTED ORDER OF STUDY

**BACHELOR OF ARTS
HISTORY**
Suggested Order of Study

MAJOR CODE 42

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Hist 110 U.S. Hist 1492-1877	3	Hist 120 U.S. Hist 1877-Present	3
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Gen Ed [Math]	3	PSc 120 U.S. State, Local Gov't	3
Gen Ed [Humanities or Fine Arts]	3	Gen Ed [Science]	4-5
HPER 101 PE Activity	2	HPER 160 Personal Health or equiv	2
Psy 120 Freshman Orientation	1		
	<u>15</u>		<u>15-16</u>

() Prerequisite

[] Dept Recommendations

CHECKLIST

SUGGESTED ORDER OF STUDY

INDUSTRIAL ARTS
Suggested Order of Study
(Option II-General Industrial Arts)

MAJOR CODE 35

1st Semester	FRESHMAN	2nd Semester
--------------	----------	--------------

Course	Hours	Course	Hours
Auto 100 Automotive Engines	7	Draf 100 Intro to Drafting	3
Psy 110 Psy of Human Develop	5	Mach 100 Intro Mach Tool Process	5
Eng 101 English Composition	3	Hist 110 U.S. History	3
Psy 120 Freshman Orientation	1	Eng 102 English Composition	3
	<u>16</u>	Math 130 College Algebra	3
			<u>17</u>

SOPHOMORE

Draf 130 Machine Drafting (Draf 110)	3	Auto 120 Auto Elec & Emission Con	7
Mach 260 Fund of Metallurgy	2	Sp 100 Speech Techniques	3
Art 100 Art Composition	3	Phys 100 Physical Science	5
HPER 101 Intro to Phys Act	2	HPER 160 Personal Health	2
Bio 101 General Biology	4	Ed 200 Explor Experience	1
	<u>14</u>		<u>18</u>

JUNIOR

IA 320 Applied Electricity OR Auto 120	4	IA 301 Wood Technology (IA 300) Psy 302 Psy of Exceptional Child (Psy 110)	3
IA 300 Woodworking	3	PSc 120 Govt, St & Local	3
Gen Ed [Fine Art or Lit]	3	Ed 330 Struct of Teach (Psy 310)	2
Psy 310 Educ Psychology	3	Ed 333 Video Teach Lab	1
*Industrial Arts Elective	3	*Industrial Arts Elective	3
	<u>16</u>		<u>15</u>

SENIOR

IA 330 Gen Industrial Arts Shop	3	Ed 462 Stud Teach Sec	6
Eng 311 American Lit	3	Ed 432 Crit Issues in Educ	2
IA 335 Shop Organ & Mgmt	3	Ed 402 Hist & Phil or Educ	2
General Education Elective	3	Ed 370 Intro Instruc Media	2
*Industrial Arts Elective	3	Ed 341 Teach IA in Sec Plus ONE of the Following—	
	<u>15</u>	Psy 412 Measurement & Eval Ed 420 Intro to Counseling Ed 412 Soc Found of Curric	<u>3</u>

() Prerequisites

[] Dept Recommendations

*Industrial Arts Electives should be chosen from courses listed in the following areas:

Automotive Technology: 200, 220, 250
Drafting & Design Tech: 120, 220, 200,

210, 230

Metal Technology: 110, 210, Foundry
Graphics, Jew & Silv: 200, 205, 230
(Art Department)

For Additional Information Contact:
Mr. Robert Gelso
Office: Industrial Arts Annex
Phone: 305

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF ARTS
PRE-JOURNALISM**
Suggested Order of Study

MAJOR CODE 133

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
*Foreign Language	5	*Foreign Language	5
[Math 110 or equiv]	3	PolSc 120 Govt: U.S., State & Local	3
Hist 110 or 120	3	[Speech]	3
Elective	3	Elective	3
[Psy 120 Freshman Orientation]	1		
	<u>18</u>		<u>17</u>
SOPHOMORE			
*Literature [Eng 271]	3	*Literature [Eng 272]	3
*Foreign Language	3	*Econ 201 or 202	3
[Bio 101 or Phys 100]	4-5	Elective	7
[HPER 101 or 160]	2	**Electives	3
Elective	3		
	<u>15-16</u>		<u>16</u>

[] Meets MSSC General Education requirements.

Electives should be chosen from sociology, psychology, political science, philosophy, mathematics, accounting, English and journalism. (See note below)

Completion of the above requirements does not necessarily assure acceptance into a School of Journalism. The student is responsible for contacting his or her choice of Journalism School and requesting information pertaining to the proper procedure for applying for application into that School.

*Strongly recommended for students expecting admission to a school of journalism their junior year.

**For students interested in advertising MM 300-Principles of Marketing is strongly recommended.

For Additional Information Contact:
Mr. Richard Massa
Office: 117 Hearnies Hall
Phone: 228

**ASSOCIATE OF SCIENCE
LAW ENFORCEMENT MAJOR**
Suggested Order of Study

MAJOR CODE 114

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
LE 100 Intro to Law Enforcement	3	LE 150 Interview and Report Writing	2
LE 110 Police Organization and Administration	2	PSc 120 Gov't: Natl, St, Local	3
Eng 101 Composition	3	Psy 100 General Psychology	3
Math 110 Intro to College Math	3	Phys 100 Fundamentals of Physical Science	5
Soc 110 Intro to Sociology	3	Soc 212 Social Problems	3
HPER 160 Personal Health	2		
Psy 120 Freshman Orientation	1		
	<u>17</u>		<u>16</u>

SUGGESTED ORDER OF STUDY

	SUMMER	
LE 190 Supervised Police Work	6	
SECOND YEAR		
LE 200 Criminal Investigations	3	LE 250 Criminal Law
LE 210 Criminal Procedures	3	LE 290 Supervised Police Work II
Sp 100 Speech Techniques	3	Elective [Advisor Approved]
Soc 322 Criminology	3	Soc 412 Juvenile Delinquency
Psy 221 Psychology of Personal Adjustment	3	HPER 220 First Aid
	<u>15</u>	Gen Ed [Lit or Fine Arts]
		<u>17</u>

[] Dept Recommendations

For Additional Information Contact:
 Mr. Don Seneker
 Office: 103 Police Academy
 Phone: 219

ASSOCIATE OF SCIENCE MACHINE TECHNOLOGY MAJOR Suggested Order of Study

MAJOR CODE 115

1st Semester	FIRST YEAR	2nd Semester	
Course	Hours	Course	Hours
Mach 100 Intro to Mach Tool Processes	5	Mach 120 Adv Mach Tool Processes	5
Draf 110 Intro Drafting	3	Mach 260 Fundamentals of Metallurgy	2
Mach 160 Process Instrumentation	2	Draf 130 Machine Drafting	3
Psy 100 General Psychology	3	HPER 101 Intro to Physical Activity	2
Psy 120 Freshman Orientation	1	Math 130 College Algebra	3
Gen Ed [Literature or Fine Arts]	3		
	<u>17</u>		<u>15</u>

SECOND YEAR

Mach 210 Fundamentals of Cutting Tools	5	Mach 240 Fundamentals of Toolmaking	5
Eng 101 Composition	3	Sp 100 Speech Techniques	3
Phys 100 Fund of Physical Science	5	Gen Ed [Literature or Fine Arts]	3
Gen Ed Hist 110 or PSc 120	3	Elective [Technical]	3
	<u>16</u>		<u>14</u>

[] Dept Recommendations

For Additional Information Contact:
 Mr. Donald Schultz
 Office: 115 Technology Bldg
 Phone: 279

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE MANAGEMENT-TECHNOLOGY Suggested Order of Study

MAJOR CODE 74

The Bachelor of Science in Management-Technology is a **transfer** degree program and requires a minimum of an Associate of Science degree (or equivalent) in an acceptable technological field for admission to the program.

Associate of Science Degree (or equivalent) in
an acceptable technological field

GENERAL EDUCATION (46)	Hours
Eng 101 English Comp.	3
Eng 102 English Comp. (Eng 111 satisfies Eng 101 & 102)	3
Speech	3
Check One: Sp 100 Speech Techniques Sp 131 Voice and Articulation Sp 302 Business & Professional	
Mathematics 110 or above (write in:)	3
HPER 101 P.E. Activity	2
HPER 160 Personal Health or equiv	2
Literature-any level qualified	3
Fine Arts	6
Check Two: Art Theatre Foreign Language (beyond degree requirement) Literature Music Philosophy (write in:)	
Biological Science	4
Physical Science	5
Hist 110 or 120 (Both Required)	3
PSc 120 U.S. State & Local Govt	3
Behavioral and Social Sciences	3
Check One: Psychology Sociology Economics History Political Science Geography (write in:)	
Elective outside major area (write in:)	3

BSMT BUSINESS CORE REQUIREMENTS (33)	3
ACC 101 Elem. Acctg. I	3
ACC 102 Elem. Acctg. II	3
GB 320 Business Comm.	3
GB 301 Business Law I	3
GB 302 Business Law II	3
ECON 201 Prin. of Econ. I	3
ECON 202 Prin. of Econ. II	3
ECON 350 Financial Mgmt.	3
MM 300 Principles of Mktg.	3
MM 350 Principles of Mgmt.	3
MM 352 Personnel Management	3

BSMT BUSINESS ELECTIVES (9)	3
Select 9 hours from:	
ACC 310 Cost Accounting	3
MM 401 Promotional Strategy	3
MM 431 Production Mgmt.	3
MM 412 Marketing Mgmt.	3
MM 452 Business Policy	3
GB 321 Business Statistics	3
GB 337 Managerial Data Process.	3

For Additional Information Contact:
Dr. Julio S. Leon
Office: 117 Business Admin. Bldg.
Phone: 249

The BSMT requires a total of 124 hours and must include 40 hours of upper division credit (courses numbered 300 or above).

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN BUSINESS
MARKETING AND MANAGEMENT MAJOR**
Suggested Order of Study

MAJOR CODE 72

1st Semester		FRESHMAN	2nd Semester	
Course	Hours	Course	Hours	
GB 101 Introduction to Business	3	Eng 102 Composition (Eng 101)	3	
Eng 101 Composition	3	Hist 110 U.S. History 1492-1877	3	
Elective [Psy 100 General Psychology]	3	Math 131 Finite Math	3	
HPER 101 Intro to Physical Activity	2	Gen Ed [Speech]	3	
PSc 120 Govt: National, State, Local	3	Gen Ed [Fine Arts]	3	
Psy 120 Freshman Orientation	1			
Electives	2			
	<u>17</u>			<u>15</u>
 SOPHOMORE				
Acct 101 Elem Accounting I	3	Acct 102 Elem Acct II (Acct 101)	3	
Econ 201 Principles of Economics	3	Econ 202 Principles of Economics	3	
Gen Ed [Bio 101 General Biology or equiv]	4	GB 320 Business Communications	3	
Gen Ed [Humanities or Fine Arts]	3	Phys 100 Fund of Physical Science or equiv	5	
HPER 160 Personal Health	2	Electives [Comp 100]	3	
	<u>15</u>			<u>17</u>
 JUNIOR				
MM 300 Principles of Marketing	3	MM 312 Retailing	3	
MM 350 Principles of Management	3	MM 352 Personnel Management	3	
GB 301 Business Law I	3	GB 337 Managerial Data Processing	3	
GB 321 Business Statistics I	3	Econ 350 Financial Management	3	
Gen Ed [Humanities or Fine Arts]	3	Required Business Elective	3	
	<u>15</u>	Choose one from: GB 302, Econ 300, GB 322, MM 441, Acct 498-Seminar in Managerial Accounting		
				<u>15</u>
 SENIOR				
MM 401 Promotional Strategy	3	MM 452 Business Policy	3	
MM 412 Marketing Mangement	3	Electives in Business or Econ [No. 300 or above]	3	
MM 431 Production Management	3	Electives	6	
Elective in Business or Econ [No. 300 or above]	3			
Electives	3			
—Apply for graduation 100 Hearnes Hall				
	<u>15</u>			

() Prerequisites
 Dept Recommendation

For Additional Information Contact:
 Dr. Julio Leon
 Office: 117 Business Bldg.
 Phone: 249

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE
MATHEMATICS**
Suggested Order of Study

MAJOR CODE 67

1st Semester	FRESHMAN	2nd Semester
---------------------	-----------------	---------------------

Course	Hours	Course	Hours
Math 150 Calculus w/Analytic Geo	5	Math 250 Calc w/Anal Geo (Math 150)	5
Chem 101 Gen Chem (Alg & Trig)	5	Physics 250 (Math 150) OR	
Eng 101 Composition	3	Chem 102 (Chem 101)	3-5
Gen Ed	3	Eng 102 Composition (Eng 101)	3
Psy 120 Freshman Orientation	1	HPER 101 PE Activity	2
	17	Gen Ed	3
			16-18

SOPHOMORE

Math 260 Calc w/Anal Geo (Math 250)	5	**Math 300 Fund of Math Thought (Co-req Math 260)	3
Chem or Physics	5	Chem or Physics	3-5
HPER 160 Personal Health	2	Upper Div Math or Gen Ed	3
Gen Ed [Bio 101]	4	Gen Ed	3
	16	Elective [Comsc 120 Intro to Prog]	3
			15-17

**Offered Spring Semester Only

() Prerequisite

[] Dept Recommendation

A major for the Bachelor of Science degree consists of 39 semester hours. The required courses are:

- Math 150 Calculus with Analytic Geometry I
- Math 250 Calculus with Analytic Geometry II
- Math 260 Calculus with Analytic Geometry III
- Math 300 Fundamentals of Mathematical Thought
- Plus 21 upper division hours in mathematics

In addition: 18 semester hours in physical sciences (excluding Chem 100, Geo 110, and Phys 100) are required

For Additional Information Contact:

Dr. J. Larry Martin
Office: 200 Math-Science Bldg.
Phone: 240

**BACHELOR OF SCIENCE IN EDUCATION
MATHEMATICS**

Plan B-One Teaching Field
Suggested Order of Study

MAJOR CODE 26

1st Semester	FRESHMAN	2nd Semester
---------------------	-----------------	---------------------

Course	Hours	Course	Hours
Math 150 Calculus w/Analytic Geo (Algebra & Trigonometry)	5	Math 250 Calc w/Analytic Geo	5
Chem 101 Gen Chem	5	Phys 250 (Math 150) OR	
Eng 101 Composition	3	Chem 102 (Chem 101)	3-5
Gen Ed	3	Eng 102 Composition	3
Psy 120 Freshman Orientation	1	Gen Ed	3
	17	HPER 101 PE Activity	2
			16-18

SUGGESTED ORDER OF STUDY

SOPHOMORE

Math 260 Calculus w/Analytic Geo	5	Math 300 Fund of Math-Thought	3
Chem or Physics	5	Upper Division Math OR	
Psych 110 Psy of Human Devel	5	[Comsc 120 Intro to Prog]	3
	15	HPER 160 Personal Health	2
		Gen Ed	9
			17

A major for the Bachelor of Science in Education with mathematics as **one teaching field** (**Plan B**) consists of a total of 33 semester hours in mathematics. The required courses are:

Math 150 Calculus w/Analytic Geometry

Math 250 Calculus w/Analytic Geometry

Math 260 Calculus w/Analytic Geometry

Math 300 Fundamentals of Math-Thought

Plus 15 upper division hours in mathematics. In addition, 10 hours in physical science, (exclusive of Chem 100, Geol 110, and Phy Sc 100), are required.

A major for the Bachelor of Science in Education degree with mathematics as **one of two teaching fields** (**Plan A**) consists of 30 semester hours. The required courses are:

Math 150 Calculus w/Analytic Geometry

Math 250 Calculus w/Analytic Geometry

Math 260 Calculus w/Analytic Geometry

Math 300 Fundamentals of Math-Thought

Plus 12 upper division hours in mathematics

() Prerequisites

[] Dept Recommendations

For Additional Information Contact:

Dr. J. Larry Martin

Office: 200 Math-Science Bldg

Phone: 240

BACHELOR OF SCIENCE MEDICAL TECHNOLOGY Suggested Order of Study

MAJOR CODE 64

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Chem 101 Gen Chemistry I (Math 140)	3	Chem 102 Gen Chem II (Chem 101)	3
Eng 101 Composition	3	Chem 162 Qual Analysis (Chem 102)	3
Math 140 Algebra & Trig	5	Bio 121 Zoology	4
HPER 101 Phys Activity	2	Eng 102 Composition (Eng 101)	3
Psy 120 Freshman Orientation	1	Gen Ed [Hist 110 or 120 U.S. Hist]	3
	14		16

SOPHOMORE

Chem 201 Analytical Chem I	5	Chem 300 Organic & Bio Chem (Chem 102)	5
Bio 231 Medical Micro-Bio (1 course in Bio & Chem)	5	*Bio 318 Cell Biology	4
Gen Ed [Literature]	3	Bio 305 Genetics (Bio course)	4
Gen Ed [Lit or Fine Arts]	3	Gen Ed [Speech]	3
	16		16

JUNIOR

Bio 306 Human Phys & Ant (Bio 121)	5	*Bio 456 Immunology	3
Phys 151 Elem College Physics (Math 140)	5	Phys 152 Elem College Physics II (Phys 151)	3
Gen Ed [Polsc 120]	3	Chem 421 Analytical Chem II	5
Gen Ed [Lit or Fine Art]	3	Gen Ed [Behavioral or Soc Sci]	3
Gen Ed [HPER 160 Personal Health]	2	Elective	3
	18		17

SUGGESTED ORDER OF STUDY

SENIOR

The fourth year consists of 12 months of study at an accredited school of Medical Technology.

() Prerequisites

[] Dept Recommendations

*Courses normally offered only every other year—Adjust schedule accordingly.

For Additional Information Contact:
 Dr. Vernon Biamonte
 Office: Science-Math 218
 Phone: 241
 OR
 Dr. Melvyn Mosher
 Office: S-220 & PA-C
 Phone: 241/219

MAJOR CODE
PRE-DENTAL 132
PRE-MED 135
PRE-VET 135

PRE-MEDICINE, PRE-DENTISTRY, PRE-VETERINARY Suggested Order of Study

(This program will also qualify the student for the Bachelor of Science in Biology.)

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Bio Gen Biology	4	Bio 122 Zoological Survey (Bio 101)	3
Chem 101 Gen Chem I	5	Chem 102 Gen Chem II (Chem 101)	3
Math 140 College Alg & Trig OR Math 150 Calculus w/Anal Geo	5	Comp 120 Intro to Prog (Math 130)	3
Psy 120 Freshman Orientation	1	Eng 101 Composition	3
	<u>15</u>	Spch 100 Speech Techniques	3
		Gen Ed	<u>2</u>
			<u>17</u>

SOPHOMORE

Bio 112 Bot Survey (Bio 101)	3	**Bio 211 Microbiology	3
Bio 305 Genetics (Bio 101)	4	(Bio 101 & Chem 102)	5
Eng 102 Composition (Eng 101)	3	Phys 152 Elem Phys II (Phy 151)	3
Phys 151 Elem Physics I (Math 140)	5	Psy 110 Psy of Human Devel	5
Gen Ed	2	Bio 210 Gen Physio (Bio 122)	4
	<u>17</u>		<u>17</u>

JUNIOR

Bio 331 Comp Anatomy (B)	5	Bio 318 Cell Biology (C) OR	4
Chem 301 Organic Chem I	5	Bio 456 Immunology	5
Bus 302 Business Law	3	Chem 302 Organic Chem II	5
Gen Ed	3	Bio 462 Embryology (B)	5
	<u>16</u>	Gen Ed	<u>3</u>
			<u>16-17</u>

SENIOR

Bio 316 Econ Botany (A)	3	Bio 402 Gen Ecology (D)	4
Bio 431 Animal Physiology (C) OR Bio 433 Histology (C)	5	Bio 306 Human Anat & Phys (B)	5
Bio 490 Seminar	4-5	Gen Ed	8
Gen Ed	1	Math 310 Elem Statistics	<u>3</u>
Chem 201 Analytical Chem I	3		<u>20</u>
	<u>14-15</u>		

—Make application for graduation
100 Hearnes Hall

SUGGESTED ORDER OF STUDY

Students should also check with the pre-med advisor about any specific professional school that he or she wishes to attend. The individual school may have some other specific requirement.

General Education Electives

Hist 110 or 120	3
PolSc 120	3
Literature/Fine Arts	9
HPER	4

() Prerequisite

For Additional Information Contact:
Dr. Vonne R. Prentice
Pre-Professional Advisor
Office: 308 Science Building
Phone: 226

BACHELOR OF ARTS MUSIC MAJOR Suggested Order of Study

MAJOR CODE 43

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Mus 111 Music Theory	3	Mus 109 SS & Ear-training	2
Music—Applied Music (Major)	2	Mus 112 Music Theory (Mus 111)	3
Music—Large Ensemble	2	Music—Applied Music	2
Recital Attendance	-	Music Large Ensemble	2
Eng 101 Composition	3	Recital Attendance	-
Gen Ed [Hist 110 or 120]	3	Eng 102 Composition (Eng 101)	3
Psy 120 Freshman Orientation	2	Gen Ed [Behavioral Sci]	3
Music—Applied Piano	1	Music—Applied Piano	1
	16		16

[Enrollment in more than one Performing Ensemble is strongly encouraged]

SOPHOMORE

Mus 210 SS & Ear-training	2	Music 212 Music Theory (Mus 211)	3
Mus 211 Music Theory (Mus 112)	3	Music—Applied Music (Major)	2
Music—Applied Piano	1	Music—Large Ensemble	2
Music—Applied Music (Major)	2	Music—Applied Piano—may be waived upon passing piano proficiency exam	1
Music—Large Ensemble	2	Recital Attendance	-
Recital Attendance	-	Psy 310 Educ Psychology	3
Gen Ed [Math 110 or higher]	3	Gen Ed [Phys Sci]	5
Gen Ed [Speech]	3		
Gen Ed [Polsc 120]	3		16
	19		

Performing Ensembles	
Music 121, 321 Choir	2
Music 151, 251 Orchestra	2
Music 191, 291, 391, 491 Marching Band—Fall only	2
Music 192, 292, 392, 492 Concert Band—Spring only	2
Music 141, 341 Lab Band	1
Music 161, 361 Vocal Ensemble (member of choir)	1
Music 171, 371 Brass Choir	1

() Prerequisite
[] Dept Recommendation

For Additional Information Contact:
Dr. F. Joe Sims
Office: Music 216
Phone: 262

Dr. Al Carnine (Vocal)
Office: Music 122
Phone: 243

Mr. Delbert Johnson (Instrumental)
Office: Music 132
Phone: 243

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
MUSIC MAJOR**
Suggested Order of Study

MAJOR CODE 27

1st Semester	FRESHMAN	2nd Semester
Course	Hours	Course
Music 111 Music Theory	3	Music 109 SS & Ear-Training
Music—Instrumental Techniques	2	Music 112 Music Theory (Mus 111)
Music—Applied Music (Major)	2	Music—Instrumental Techniques
Music—Performing Ensemble	1	Music—Performing Ensemble
Music 131 Intro to Professional Music Education	1	Music—Applied Music (Major)
Recital Attendance	-	Music—Applied Music Piano
Eng 101 Composition	3	Recital Attendance
Gen Ed [Hist 110 or 120]	3	Eng 102 Composition (Eng 101)
Gen Ed [HPER 101 or equiv]	2	Psy 110 Psy. of Human Development
Psy 120 Freshman Orientation	1	
Music—Applied Music Piano	1	
	<u>19</u>	<u>19</u>

[Enrollment in more than one Performing Ensemble is strongly encouraged]
[At least one summer enrollment is strongly recommended to reduce semester enrollments]

SOPHOMORE		
Music 210 SS & Ear-Training	2	Music 212 Music Theory (Mus 211)
Music 211 Music Theory (Mus 112)	3	Music 182 Instrumental Conducting
Music 181 Choral Conducting	2	Music—Instrumental Techniques
Music—Applied Music (Major)	2	Music—Applied Music (Major)
Music—Performing Ensemble	1	Music—Performing Ensemble
Recital Attendance	-	Recital Attendance
Gen Ed [Math 110 or higher]	3	Music—Instrumental Techniques
Gen Ed [Speech]	3	Psy 310 Educ Psychology
Gen Ed [Pol Sc 120]	3	Gen Ed [Literature]
Music—Applied Music Piano	1	Music—Applied Piano—may be waived upon passing piano proficiency exam
	<u>20</u>	<u>1</u>

() Prerequisites
[] Dept Recommendation

Apply for admission to Teacher
Education program, 220 Education
Psychology Building

Instrumental Techniques
Music 231 String
Music 232 Brass
Music 361 Percussion
Music 362 Woodwind

For Additional Information Contact:
Dr. F. Joe Sims
Office: Music 216
Phone: 262

Performing Ensembles
Music 121, 321 Choir
Music 151, 351 Orchestra
Music 191, 291, 391, 491 Marching Band Fall only
Music 192, 292, 392, 492 Concert Band- Spring only
Music 141, 341 Lab Band
Music 161, 361 Vocal Ensemble (member of choir)
Music 171, 371 Brass Choir

Dr. Al Carnine (Vocal)
Office: Music 122
Phone: 243

Dr. Delbert Johnson (Instrumental)
Office: Music 132
Phone: 243

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
NURSING MAJOR
Suggested Order of Study**

MAJOR CODE 117

Students must apply for admission and be accepted into the Nursing Program before they may enroll in Nurs 100, 120, 130, 220 or 240. Applications for the Nursing Program may be obtained from the Department of Nursing Office in Kuhn Hall.

		PRE-NURSING SUMMER	
Course	Hours		
Math 30 Intermediate Algebra	3		
Biology 121 General Zoology	4		
	<u>7</u>		
1st Semester		NURSING FIRST YEAR	2nd Semester
Course	Hours	Course	Hours
Nurs 110 Fund of Nursing	5	Nurs 110 Maternal & Child Care	9
Bio 221 Human Anatomy & Phys	5	Chem 100 Intro Chemistry	5
Eng 101 Composition	3	Psy 100 General Psychology	3
Soc 110 Intro to Sociology	3		
Psy 120 Freshman Orientation	<u>1</u>		
	<u>17</u>		<u>17</u>
		SUMMER	
Nursing 130 Psy Mental Hlth Nurs	4		
		SECOND YEAR	
Nurs 220 Nursing Physical III I	9	Nurs 240 Nurs in Physical III II	9
Bio 231 Fund of Medical Microbiology	5	HPER 101 Intro to Phys Act	2
vGen Ed (Literature or Fine Art)	<u>3</u>	Sp 100 Speech Techniques	3
	<u>17</u>	Gen Ed (PSc 120 or Hist 110)	<u>3</u>
			<u>17</u>

For Additional Information Contact:
Mrs. Carolee Vlasak
Office: 208 Kuhn Hall
Phone: 222

**ASSOCIATE OF ARTS
PRE-OPTOMETRY
Suggested Order of Study**

MAJOR CODE 136

Requirements for admission vary from one School of Optometry to another. The courses listed below meet requirements for an A.A. degree at MSSC but may not be required at the second school. The **student is responsible** for obtaining a list of required courses that are acceptable to the School of Optometry that he or she plans to attend.

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Math 150 Calculus I (Alg & Trig)	5	Bio 121 Zoology	4
Hist 110 or 120 U.S. History	3	Psy 100 Gen Psychology	3
Chem 101 Gen Chem I (Alg & Trig)	5	Chem 102 Gen Chem II	3
Psy 120 Freshman Orientation	<u>1</u>	HPER 101 or 160	<u>2</u>
	<u>17</u>		

—Obtain a list of courses required by
Optometry School of your choice

SUGGESTED ORDER OF STUDY

SOPHOMORE

Phys 151 (Alg & Trig)	5	Phys 152 (Alg & Trig)	3
Speech 100 Speech Tech	3	Econ 202 Principles of Econ	3
Eng 271 or 272 Eng Lit	3	Electives for transfer	9
Electives for transfer	<u>6</u>		
	<u>17</u>		

() Prerequisite Course

For Additional Information Contact:
 Mr. Arthur Strobel
 Office: 224 Sci Bldg
 Phone: 241

PRE-PHARMACY

MAJOR CODE 137

Entrance requirements vary considerably from one Pharmacy School to another. The student should obtain a list of recommended courses from the Pharmacy School that he/she plans to attend and the dates to file applications for admission.

The Pharmacy School at the University of Missouri in Kansas City (UMKC) requires the following: Composition—3 hrs., Math (Alg & Trig or higher)—5 to 8 hrs., General Chemistry and Qualitative Chemistry—8 to 10 hrs., Electives in Humanities and Social Science to complete a total of 30 hrs.

Suggested Order of Study

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Chem 101 Gen Chem	5	Chem 102 Gen Chem (Chem 101)	3
Math 140 Algebra & Trig	5	Chem 162 Qualitative Analysis	3
Eng 101 Composition	3	[Hist 110 or 120 U.S. History]	3
[Psy 100 or Soc 110]	3	Elective Math/Polsc/Econ/Lit	6-8
Psy 120 Freshman Orientation	<u>1</u>		
	<u>17</u>		<u>15-17</u>

() Prerequisite

[] Suggested Elective

For Additional Information Contact:
 Mr. Harrison Kash
 Office: 224 Sci Bldg
 Phone: 241

BACHELOR OF SCIENCE IN EDUCATION PHYSICAL EDUCATION MAJOR (GRADES K-8) HEALTH CERTIFICATION AND DRIVER EDUCATION CERTIFICATION

MAJOR CODE 28

Suggested Order of Study

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Eng 101 Composition	3	Bio 121 Zoology	4
HPER 160 Personal Health	2	Eng 102 Composition (Eng 101)	3
PSc 120 [Gov't, Nat, State, Local]	3	Gen Educ [Hist 110 or 120]	3
Psy 110 Psy of Human Develop	5	Gen Educ [Speech 100 Sp Tech]	3
Psy 120 Freshman Orientation	<u>1</u>	Gen Educ [Math 110 or higher]	<u>3</u>
	<u>14</u>		<u>16</u>

SUGGESTED ORDER OF STUDY

SOPHOMORE		
HPER 230 Safety	2	HPER 335 Hist & Phil of PE
Gen Educ Fine Art	3	Bio 227 Human Anat & Physio (Bio 121)
Chem 100 Intro Chemistry OR Bio 211 Microbiology	5	Psy 310 Ed Psy (Psy 110)
Soc 121 Family	3	HPER 220 First Aid
HPER 230 Safety	2	LE 110 Intro Law Enforcement
	<u>15</u>	Gen Educ [Literature]
		<u>18</u>
JUNIOR		
HPER 370 School Health	3	HPER 312 Teach Elem School PE
HPER 310 Elem Sch PE Program	3	HPER 342 Kinesiology (Bio 221)
HPER 321 Team Sports	3	HPER 362 Adv Driver & Traf Safe
HPER 332 Rhythm Form	2	HPER 340 Motor Learning
Gen Educ [Literature or Fine Art]	3	Ed 320 Struc of Teaching (Psy 310)
HPER 360 Intro Driver Educ	3	Ed 321 Video Teaching Lab
	<u>17</u>	DH 310 Nutrition
		<u>17</u>
SENIOR		
HPER 365 Socio-Psy Aspects of Ath	2	ED 370 Instructional Media
HPER 431 Physiol of Exercise	2	Ed 338 Teach Hlth & PE
Soc 352 Group Dynamics	3	Psy 412 Meas & Evaluation
Psy 302 Exceptional Child	2	Ed 402 Hist & Phil of Ed
Electives	6	Ed 442 Crit Issues in Ed
	<u>15</u>	ED 464 Student Teaching
		<u>16</u>

() Prerequisites

[] Dept Recommendation

For Additional Information Contact:
Dr. Max Oldham
Office: PE 118
Phone: 276

BACHELOR OF SCIENCE IN EDUCATION PHYSICAL EDUCATION MAJOR (GRADES K-12) Suggested Order of Study

MAJOR CODE 28

1st Semester	FRESHMAN	2nd Semester
Course	Hours	Course
Eng 101 Composition	3	Eng 102 Composition (Eng 101)
Gen Educ [PSc 120 Gov't, Nat, State, Loc]	3	Gen Educ [Hist 110 or 120 U.S. History]
Psy 110 Psy of Human Develop	5	Bio 121 Gen Zoology
Gen Educ [Sp 100 Speech Tech]	3	Gen Educ [Math 110 or higher]
Psy 120 Freshman Orientation	<u>1</u>	Soc 110 Intro to Sociology
	<u>15</u>	
		<u>16</u>
SOPHOMORE		
HPER 251 Fund of PE Act I	4	HPER 252 Fund of PE Act II
Gen Educ [Eng 180 or 181]	3	Bio 221 Human Anat & Physio (Bio 121)
Gen Educ [Music 110 or Art 110 or Theatre 110]	3	Psy 310 Ed Psy (Psy 110)
Phys 110 Fund of Phys Sci OR Chem 100 Intro Chem	5	HPER 335 Hist and Phil of PE
	<u>15</u>	Gen Educ [Literature or Fine Art]
		<u>17</u>

SUGGESTED ORDER OF STUDY

HPER 370 School Health
HPER 310 Elem Sch PE Prog
HPER 351 (MEN) Theo of Football
Elective (Women) free elective
HPER 321 Team Sports
HPER 340 Motor Learning
HPER 332 Rhythmic Form & Analysis

JUNIOR	
3	HPER 312 Tch Elem Sch PE
3	HPE 342 Kinesiology (Bio 221)
2	HPER 350 Theo of Basketball
3	HPER 352 (Women) Theo of Sp Spts
3	Elective (MEN) free elective
3	ED 330 Struc of Teaching (Psy 310)
2	Ed 331 Video Teach Lab
2	Psy 302 Exceptional Child
19	
	18

HPER 365 Socio-Psy Aspects of Ath
HPER 431 Physiol of Exercise
HPER 470 Adm of Physical Educ
HPER 450 Care & Prev of Injuries
Electives

SENIOR	
2	Ed 370 Instructional Media
2	ED 338 Teaching Hlth & PE
2	Psy 412 Meas and Evaluation
3	Ed 402 Hist and Phil of Ed
6	Ed 442 Crit Issues in Ed
6	Ed 464 Student Teaching
15	
	16

() Prerequisites

[] Dept Recommendation

For Additional Information Contact:
 Dr. Max Oldham
 Office: PE 118
 Phone: 276

**BACHELOR OF SCIENCE IN EDUCATION
 PHYSICAL EDUCATION MAJOR (GRADES 7-12)
 AND HEALTH CERTIFICATION**
Suggested Order of Study

MAJOR CODE 28

1st Semester

Course	Hours
HPER 160 Personal Health	3
Eng 101 Composition	3
Gen Educ [PSc 120 Gov't, Nat, State, Loc]	3
Psy 110 Psy of Human Development	5
Psy 120 Freshman Orientation	1
	15

FRESHMAN

Course	Hours
Bio 121 Zoology	4
Eng 102 Composition (Eng 101)	3
Gen Educ [Hist 110 or Hist 120]	3
Gen Educ [Sp. 100]	3
Gen Educ [Math 110 or higher]	3
	16

SOPHOMORE

Course	Hours
HPER 251 Fund of PE Act I	4
Psy 221 Psy Personal Adjustment	3
Soc 121 Family	3
Chem 100 Introductory Chemistry OR Bio 221 Microbiology	5
	15

JUNIOR

Course	Hours
Psy 310 Educ Psy (5 hrs Psych)	3
HPER 370 School Health	3
HPER 351 Theo of Football	2
Ed 330 Struc of Teach	2
Ed 331 Video Teach Lab	1
Gen Educ [Literature or Fine Art]	3
HPER 321 Team Sports	3
	17
	15

SUGGESTED ORDER OF STUDY

	SENIOR		
HPER 431 Physiol of Exercise	2	Ed 370 Instructional Media	2
HPER 450 Prevention & Care of Inj	3	Ed 338 Teach Hlth & PE	2
HPER 470 Adm of Physical Educ	2	Psy 412 Meas & Evaluation	2
HPER 365 Socio-Psy Aspects of Ath	2	Ed 402 Hist & Philo of Educ	2
Electives	<u>7</u>	Ed 442 Crit Issues in Ed	2
	<u>16</u>	Ed 464 Student Teaching	<u>6</u>

() Prerequisites

[] Dept Recommendation

For Additional Information Contact:
Dr. Max Oldham
Office: PE 118
Phone: 276

PRE-PHYSICAL THERAPY
(not a major-Preparation for Transfer to professional school only)
For Transfer to University of Missouri-Columbia
Suggested Order of Study

MAJOR CODE 139

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Math 140 Algebra & Trig	5	Psy 100 General Psychology	3
Bio 121 General Zoology	4	Hist 110 or 120 U.S. History	3
PSc 120 U.S. State & Local Govt	3	Bio 211 Anatomy & Physio (Bio 121)	5
Psy 120 Freshman Orientation	<u>1</u>	Sp 100 Speech Techniques	<u>3</u>
	<u>16</u>		<u>17</u>

SOPHOMORE

Chem 101 Inorg Chem (Math 140)	5	Phys 100 Fund of Physical Science	5
Psy 221 Psy of Personal Adj	3	OR Chem 102 Inorg Chem (Chem 101)	3
Social Studies—Elective	3	AND**Chem 162 Qual Analysis	3
Humanities—Elective	3	(Chem 102)	5
	<u>14</u>	Psy 310 Educ Psy (Psy 100)	3
		Humanities—Electives	<u>6</u>
			<u>19</u>

—Apply for admission to Physical Therapy School

**Offered in spring only

Summer Sophomore year and Junior and Senior years to be completed at the University of Missouri-Columbia for Missouri residents. Residents of other states should consult with Mr. Tillman, Department of Biology, as individual Schools of physical therapy may require different prerequisites. Completion of the above courses does not automatically admit an applicant into the physical therapy program at the University of Missouri.

() Prerequisites

[] Recommended

A general Associate of Arts degree may be awarded if one of the Humanities electives is a literature course and if the student has 2 credits in HPER.

For Additional Information Contact:
Dr. David Tillman
Office: S-308C
Phone: 226

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE
PHYSICS MAJOR**
Suggested Order of Study

MAJOR CODE 68

Physics students who plan to do graduate work in engineering should include Chem 101, Chem 102, Comp 120, Comp 130, Draf 110 and Draf 120 in their program as well as the following special courses: Chemical Engineering—Chem 201, Chem 302, Chem 401, Chem 402, and Chem 421; Electrical Engineering—Math 351, Math 412, Math 431 and Phys 480 (circuit analysis); Engineering Mechanics—Math 260, Math 351, Math 412, Math 431 and Phys 480 (fluid mechanics and heat transfer); Mechanical Engineering—Draf 130, Phys 480 (fluid mechanics and heat transfer) plus additional courses in machines.

1st Semester	FRESHMAN	2nd Semester
Course	Hours	Course
Math 150 Calculus I	5	Phys 250 Gen Physics I (Math 150)
*Chem 101 Gen Chem I (Alg & Trig)	5	Math 250 Calculus II (Math 150)
Eng 101 Composition	3	*Chem 102 Gen Chem II
Gen Ed [Hist 110 or 120 U.S. Hist]	3	Eng 102 Composition
Psy 120 Freshman Orientation	1	
	17	Hours
SOPHOMORE		
Phys 260 Gen Physics II (Phys 250)	5	Phys 322 Classical Mechanics OR
Math 260 Calculus III (Math 250)	5	Phys 341 Thermal Physics
Gen Ed [Psc 120 Govt: St & Local]	3	Phys 372 Electronic Circuits
Gen Ed [HPER 101 Physical Act]	2	Math 322 Diff Equations
	15	3-4
Gen Ed [HPER 160 Pers Hlth]		Gen Ed [HPER 160 Pers Hlth]
General Education		General Education
		15-16
JUNIOR		
Phys 301 Modern Physics	4	Phys 341 Thermal Physics OR
Phys 381 Intermed Physics Lab OR		Phys 322 Classical Mechanics
Phys 401 Elect & Magnetism	3-4	(or elective)
Gen Ed [Bio 101 Gen Bio]	4	Phys 452 Quantum Mech (or elect)
General Education	3	
	14-15	3-4
Gen Ed [Speech]		Math Elective
General Education		
		15-16
SENIOR		
Phys 401 Elec & Magnetism OR		Phys 452 Quantum Mechanics
Phys 381 Intermed Physics Lab	3-4	(or elective)
General Education	3	Phys 498 Seminar
General Education	3	Electives
Phys or Math Elective	3	
Electives	3	
	15-16	3

*Suggested elective (not strict requirement)

() Prerequisite

[] Dept Recommendation

Students should enroll in Comsc 120
Computer Programming before the Junior
Year.

For Additional Information Contact:
Dr. Russell Phillips
Office: 226 Science-Math Bldg
Phone: 241

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN EDUCATION PHYSICS MAJOR

MAJOR CODE 29

Plan B-Single Teaching Field Suggested Order of Study

1st Semester

Course	Hours
+[Chem 101 Gen Chem I]	5
Math 150 Calculus I	5
Eng 101 Composition	3
Psy 120 Freshman Orientation	1
Gen Ed [Hist 110 or 120]	<u>3</u>
	<u>17</u>

FRESHMAN

2nd Semester

Course	Hours
+[Chem 102 Gen Chem II] (Chem 101)	3
Math 250 Calculus II (Math 150)	5
Eng 102 Composition (Eng 101)	3
Phys 250 Gen Physics I (Math 150)	<u>5</u>
	<u>16</u>

SOPHOMORE

Math 260 Calculus III (Math 250)	5	Phys 322 Classical Mech or Phys Elec	3-4
Phys 260 Gen Physics II (Phy 250)	5	+[Math 322 Diff Equ] (Math 260)	3
Gen Ed [Literature]	3	Psy 110 Psy of Human Devel	5
Gen Ed [Bio 101 Gen Bio or equiv]	<u>4</u>	HPER 160 Personal Health or equiv	2

Course	Hours
Phys 322 Classical Mech or Phys Elec	3-4
+[Math 322 Diff Equ] (Math 260)	3
Psy 110 Psy of Human Devel	5
HPER 160 Personal Health or equiv	2
Gen Ed—Speech	<u>3</u>

16-17

JUNIOR

Phys 301 Modern Physics	4	Educ 330 Struc of Teach Sec	2
Phys 381 or Physics Elective	3	Phys 322 Classical Mech OR	
Psy 310 Educ Psy (Psy 110 or equiv)	3	Phys 373 Electronic Circuits	3-4
Gen Ed—Humanities & Fine Arts	3	Educ 331 Video Teach Lab	1
PSc 120 Govt: U.S. St & Local	<u>3</u>	Gen Ed—Humanities & Fine Arts	3

Course	Hours
Educ 330 Struc of Teach Sec	2
Phys 322 Classical Mech OR	
Phys 373 Electronic Circuits	3-4
Educ 331 Video Teach Lab	1
Gen Ed—Humanities & Fine Arts	3
HPER 160 Physical Activities	2
Electives	<u>6</u>

17-18

SENIOR

Phys 381 Inter Phys Lab OR	3	Educ 462 Student Teach Sec	2
Elective		Educ 432 Crit Issues in Educ	2-3
Phys 498 Seminar	1	Educ 402 History & Phil of Educ	2-3
Gen Ed Elective (Not Physics)	3	Educ 370 Intro to Instru Media	2
Psy 302 Except Child (5 hrs Psy)	2	Educ 333 Teaching Sci in Sec	2
—Apply for graduation 100 Hearnes		Psy 412, Psy 451, or Educ 412	
Hall	<u>9</u>	(Select One)	<u>2-3</u>

12-15

—Register for National Teacher Exam
226 Educ-Psych Bldg

- +Suggested Electives
- (Not strict requirements)
- () Prerequisites
- [] Dept Recommendation

For Additional Information Contact:
Dr. Russell L. Phillips
Office: 226 Sci & Math Bldg
Phone: 226

SUGGESTED ORDER OF STUDY

**BACHELOR OF ARTS
POLITICAL SCIENCE**
Suggested Order of Study

MAJOR CODE 44

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
PSc 120 Gov't U.S. State & Local	3	Gen Ed [Geography]	3
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Hist 110 or 120 U.S. History	3	Gen Ed [Speech]	3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Biology]	4
Psy 120 Freshman Orientation	1	Gen Ed [Literature or Fine Arts]	3
	<u>13</u>		<u>16</u>

() Prerequisites

[] Dept Recommendations

GENERAL EDUCATION (46)	
Eng 101 Composition	3
Eng 102 Composition (Eng 111 satisfies Eng 101 & 102)	3
Speech	3
Sp 100 Speech Techniques	
Sp 131 Voice and Articulation	
Sp 302 Business & Professional	
Mathematics 110 or above	3
(write in)	
HPER 101 PE Activity	2
HPER 160 Personal Health or equiv	2
Literature—any level qualified	3
Fine Arts	6
Check two:	
Art	
Drama	
Foreign Language (beyond degree requirement)	
Literature	
Music	
Philosophy	
(write in)	
Biological Science	4
Physical Science	5
Hist 110 or 120 (Both required)	3
PSc 120 U.S. State & Local Gov't	3
Behavioral and Social Sciences	3
Check one:	
Psychology	
Sociology	
History	
Political Science	
Geography	
(write in)	
Elective outside major area	3
(write in)	

POLITICAL SCIENCE

The following must not duplicate the general education requirements.

Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3
Upper division Pol Sci (write in)	3

FOREIGN LANGUAGE	10
(write in)	

For Additional Information Contact:

Dr. Donald Youst
Office: Library L-13
Phone: 264

SUGGESTED ORDER OF STUDY

PRE-LAW

MAJOR CODE 50

Unlike most professional schools, law schools do not require that a student have taken any particular courses or have a particular major. For pre-law preparation, however, it is suggested that a student select a major in the social sciences, humanities, or business administration.

Most law schools have no special academic requirements for admission other than a baccalaureate degree.

For Additional Information Contact: Prof. Annetta St. Clair, Office: Library 012C, Phone: 247

BACHELOR OF ARTS PSYCHOLOGY MAJOR Suggested Order of Study

MAJOR CODE 45

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Psy 110 Psy of Human Devel	5	Eng 102 Composition (Eng 101)	3
Eng 101 Composition	3	Hist 110 or 120	3
Math 130 College Alg or higher	3	Gen Ed [Humanities or Fine Arts]	3
HPER 101 Intro to PE	2	Bio 121 Gen Zoology	4
Psy 120 Freshman Orientation	1	Elective	3
	<u>14</u>		<u>16</u>
SOPHOMORE			
*Psy 311 Applied Stat (Psy 100 or 110)	3	**Psy 312 Experimental Psy. (Psy 311)	5
Bio 306 Hum Anat & Phys (Bio 121)	5	Gen Ed [Humanities or Fine Arts]	3
Gen Ed Humanities of Fine Arts [Literature]	3	Chem 101 Gen Chem (Math 130)	5
HPER 160 Personal Health	2	Gen Ed—Behavioral or Soc Sci	3
	<u>13</u>		<u>16</u>
JUNIOR			
*Psy 442 Physiological Psy (Psy 312)	3	**Psy 411 Sensation & Perception (Psy 312)	3
*Foreign Language 101 [French or German or Computer Science]	5-6	PSc 120 Govt, U.S. State & Local	3
Bio 305 Genetics (Bio 121) OR *Bio 331 Comp Chordate (Bio 121)	4-5	**Foreign Language 102 [French or German or Computer Science]	5-6
Elective in Supporting Area	3	Elective in Supporting Area	3
	<u>15-17</u>	Psy Elective	<u>3</u>
			<u>17-18</u>
SENIOR			
*Psy 451 Psy of Learning (Psy 310 or 311)	3	Psy 499 Independnet Study (Consent)	3
Psy 498 Seminar (Consent)	3	**Psy 452 Hist & Systems (Psy 311)	3
Elective in Supporting Area	3-6	Elective in Supporting Area	3-6
Electives	6	Electives	6
	<u>15-18</u>		<u>15-18</u>

—Make Application for Graduation
100 Hearnes Hall

—See Advisor about Graduate
School Admission

SUGGESTED ORDER OF STUDY

SUPPORTING AREAS

Economics/Finance	21	English/Literature	21
History	21	Journalism	21
Law Enforcement	21	Marketing/Management	21
Military Science	21	Political Science	21
Sociology	21		

*Course offered Fall Semester only

**Course offered Spring Semester only

() Prerequisite

[] Dept Recommendation

For Additional Information Contact:
Dr. J. Merrell Junkins
Office: 209 Educ-Psych Bldg.
Phone: 306

BACHELOR OF SCIENCE PSYCHOLOGY MAJOR Suggested Order of Study

MAJOR CODE 62

1st Semester

FRESHMAN

2nd Semester

Course

Psy 110 Psy of Human Devel
Eng 101 Composition
Math 131 Finite Math
HPER 101 Intro to PE
Psy 120 Freshman Orientation

Hours

5
3
3
2
1
14

Course

Eng 102 Composition (Eng 101)
Hist 110 or 120
Bio 121 Gen Zoology
Gen Ed [Humanities and Fine Arts]

Hours

3
3
4
6
16

SOPHOMORE

*Psy 311 Applied Stat (Psy 100 or 110)
Phys 151 or Chem 101 (Math 131 or 130)
PSc 120 Govt: U.S. State & Local
HPER 160 Personal Health
Elective in Supporting Area

3
5
3
2
3-5
16-18

**Psy 312 Exper Psy (Psy 311)
Behav or Soc Sci Gen Elec
Speech 100 Speech Techniques
Gen Ed [Humanities or Fine Arts]
Elective in Supporting Area

5
3
3
3
3
17

JUNIOR

*Psy 442 Physio Psy (Psy 312)
*Psy 451 Psy of Learning (Psy 320 or 311)
Elective in Supporting Area
Psychology Elective

3-5
3
15-17

**Psy 411 Sensation and Perception (Psy 312)
**Psy 452 Hist & Systems (Psy 311)
Elective in Supporting Area
Psychology Elective

3
3
3-5
3
15-17

—See Advisor About Job Opportunities

SENIOR

Psy 498 Seminar (Consent)
Elective in Supporting Area
Electives

3
3-5
9
15-17

Psy 499 Independent Study (Consent)
Elective in Supporting Area
Electives

3
3-5
9
15-17

—Make Application for Graduation 100
Hearnes Hall

—See Advisor About Graduate
School Admission

SUPPORTING AREAS

Biology
Computer Science
Physics
*Course offered only in Fall
**Course offered only in Spring
() Prerequisite
[] Dept Recommendation

21
21
21

Chemistry
Mathematics

21
21

For Additional Information Contact:
Dr. J. Merrell Junkins
Office: 209 Educ-Psych Bldg.
Phone: 306

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
PSYCHOLOGY—SPECIAL EDUCATION MAJOR**
Suggested Order of Study

MAJOR CODE 34

1st Semester		FRESHMAN	2nd Semester	
Course	Hours	Course	Hours	
Psy 110 Human Growth & Devel.	5	Psy 382 Intro to Beh Mod	3	
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3	
HPER 101 PE	2	HPER 160 Personal Health	2	
Gen Ed	6	Math 131 Finite Math	3	
Psy 120 Freshman Orientation	1	Gen Ed	5-6	
	<u>17</u>			<u>16-17</u>
SOPHOMORE				
Psy 311 Statistics (Psy 110 or 100 & Math 130 or 131)	3	Psy 310 Educational Psy	3	
Psy 302 Exceptional Child	2	Educ 340 Langauge Arts & Reading	5	
Gen Ed	<u>10-12</u>	HPER 340 Motor Learning	3	
	<u>15-17</u>	Gen Ed	5-7	
				<u>16-18</u>
JUNIOR				
Psy 312 Experimental Psy (Psy 311)	5	Psy 432 Abnormal Psy (7 hrs. Psy)	3	
Educ 330 Structures	2	Educ 312 Techniques of Teaching		2
Educ 331 Video Lab	1	Arithmetic		2
Educ 324 Intro to Special Educ	3	Educ 404 Methods for Learning		3
Psy 442 Physiological Psy	3	Disability		2
Electives	<u>2-3</u>	Educ 470 Diag & Rem Reading		3
	<u>16-17</u>	Educ 340 Lang Dev for Except.		
		Children or Speech 492 Speech		
		Correction		3
		Educ 474 Educ-Psych Testing		3
				<u>16</u>
SENIOR				
Psy 451 Psy of Learning	3	Psy 412 Meas & Evaluation	2	
Educ 420 Intro to Counseling	3	Educ 370 Instructional Media	2	
Educ 403 Curriculum & Methods MR	3	Educ 402 History & Philosophy	2	
Educ 405 Curriculum & Methods ED	3	Educ 432 Critical Issues	2	
Educ 421 Intro to Career & Occupational Education	3	Educ 407 Diagnostic Pres Tchg	3	
Electives	<u>2-3</u>	Educ 444 Student Tchg		6
	<u>17-18</u>			<u>17</u>

—See Director of Supervised Teach for placement in Spring
—Make Application for Graduation 100 Hearnes Hall

—Register for National Teacher Exam
226 Educ-Psych Bldg.

() Prerequisite
[] Dept Recommendation

For Additional Information Contact:
Dr. J. Merrell Junkins
Office: 209 Educ-Psych Bldg.
Phone: 306

SUGGESTED ORDER OF STUDY

ASSOCIATE OF SCIENCE RADIOLOGIC TECHNOLOGY Suggested Order of Study

MAJOR CODE 122

Students must apply for admission and be accepted into the Radiologic Technology Program before they may enroll in RAD 101, 170, 142, 132, 152, 241, 160, 180, 271, 111, 121, 252, or 282. Application for admission for the Radiologic Technology Program may be obtained from Mr. James K. Maupin or Mr. Wiley Beals, X-Ray Dept., St. Johns Medical Center, Joplin, MO 64801

1st Semester	FIRST YEAR	2nd Semester	
Course	Hours	Course	Hours
Rad 101 Intro to Radiology	3	Rad 132 Principles of Radiographic	3
Rad 170 Radiologic Physics I	3	Exposure	3
Rad 142 Radiographic Positioning I	3	Rad 152 Osteology	3
Bio 221 Human Anatomy and Phys	5	Rad 241 Radiographic Positioning II	3
Psy 120 Freshman Orientation	1	Math 30 Interm Algebra OR	
HPER 101 Physical Education	2	Math 130 College Algebra	3
	<u>17</u>	Psy 100 General Psychology	3
			<u>15</u>

SUMMER

Rad 160 Film Critique	2
Rad 180 Practicum in Radiology I	5
Rad 271 Radiologic Physics II	3
	<u>10</u>

SECOND YEAR

Rad 111 Medical Terminology	5	Rad 252 Radiographic Positioning	3
Rad 121 Patient Care and Special Techniques	3	Rad 282 Practicum Radiology II	3
Chem 100 Intro Chemistry	5	Gen Ed [Hist 110 or PSc 120]	3
Eng 101 Composition	3	Sp 100 Speech Techniques	3
Psy 221 Psy of Personal Adjustment	3	OA 101 Elementary Typing	3
	<u>19</u>	Gen Ed [Literature or Fine Arts]	3
			<u>18</u>

*SUMMER

Rad 290 Practicum in Radiology II	5
Rad 299 Advanced Radiology	3
	<u>8</u>

*Summer classes meet a minimum of 14 weeks

[] Dept Recommendation

For Additional Information Contact:
Mr. James K. Maupin
Office: Guest House (West of Bus. Bldg)
Phone: 272

SUGGESTED ORDER OF STUDY

**ASSOCIATE OF SCIENCE
SECRETARIAL SCIENCE**
Suggested Order of Study

MAJOR CODE 120

1st Semester	FIRST YEAR	2nd Semester	
Course	Hours	Course	Hours
OA 111 Elementary Shorthand	3	OA 120 Intermediate Shorthand	3
OA 102 Inter Typewriting	3	OA 200 Advanced Typewriting	3
GB 101 Intro to Business	3	Gen Ed [Lit or Fine Arts]	3
Eng 101 Composition	3	HPER 101 or HPER 160	2
Math 30 Inter Algebra or Math 110	3	Gen Ed [PSc 120 or Hist 110]	3
Psy 120 Freshman Orientation	1	Sp 100 Speech Techniques	3
	<u>16</u>		<u>17</u>
SECOND YEAR			
OA 210 Advanced Shorthand	3	OA 230 Secretarial Procedures	3
GB 121 Office Machines	3	OA 220 Dictation & Transcription	3
Acct 101 Elem Accounting I	3	GB 320 Business Communications	3
Gen Ed [Psy 100 or Soc 110]	3	GB 301 Business Law I	3
Econ 201 Principles of Economics	3	Gen Ed [Bio 100 or Phys 100]	4-5
	<u>15</u>		<u>16-17</u>

[] Dept Recommendation

For Additional Information Contact:
Dr. Julio S. Leon
Office: 117 Business Building
Phone: 249

**SECRETARIAL-TYPIST CERTIFICATE
ONE-YEAR SCHEDULE
Required Order of Study**

MAJOR CODE 130

1st Semester	2nd Semester		
Course	Hours	Course	Hours
OA 210 Advanced Shorthand	3	OA 200 Advanced Typewriting	3
GB 101 Intro to Business	3	OA 220 Dictation & Transcription	3
GB 110 Business Math	3	GB 220 Business Communications	3
Eng 101 Composition	3	GB 121 Office Machines I	3
Sp 100 Speech Techniques	3	Acct 101 Elem Accounting I	3
Psy 120 Freshman Orientation	1		<u>15</u>
	<u>16</u>		

For Additional Information Contact:
Dr. Julio S. Leon
Office: 117 Business Building
Phone: 249

SUGGESTED ORDER OF STUDY

**BACHELOR OF ARTS
SOCIOLOGY**
Suggested Order of Study

MAJOR CODE 46

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Soc 110 Intro to Sociology	3	[Soc 152 Anthropology]	3
Eng 101 Composition	3	Eng 102 Composition	3
Hist 110 or 120 U.S. History	3	Pol Sci 120 U.S. State & Local Gov't	3
HPER 101 Physical Activity	2	Gen Educ [Speech]	3
Psy 120 Freshman Orientation	1	Gen Ed [Bio 121 or equiv]	4
Gen Educ [Fine Arts]	3		
	<u>15</u>		<u>16</u>

() Prerequisite

[] Dept Recommendations

GENERAL EDUCATION (46 hrs)

English Composition 101	3
English Composition 102	3
Speech	3
Check One:	
Speech 100 Speech Techniques	
Speech 131 Voice and Articulation	
Speech 302 Business and Professional	
Mathematics 110 or above [Math 131]	3
If above, write in	
HPER 101 PE Activity	2
HPER 160 Personal Health or equiv	2
Literature, any level qualified	3
(write in)	
Fine Arts	6
Check Two:	
Art	
Drama	
Literature	
Music	
Philosophy or Ethics	
(write in)	
Foreign Language—beyond degree requirements of 10 hrs.	
Biology [Suggest Bio 121]	4
Physical Science, Chemistry,	
Geology or Physics	5
(write in)	
U.S. History 110 or 120	3
Political Science 120	3
Behavioral and Social Sciences	3
Check One:	
Psychology, General	
Economics, 201 or 202	
History	
Political Science	
Geography	
Elective Outside Major Area	3
Lower or Upper Division	
(write in)	

SOCIOLOGY (30)

The following must not duplicate the General Education Requirements.

Soc 110 Introduction to Sociology	3
Soc 210 Social Problems (Soc 110)	3
Soc 311 Social Stratification (Soc 110)	3
Soc 321 Social Institutions (6 hrs)	3
Soc 421 Sociological Theory (9 hrs Soc)	3
Soc 432 Sociological Investigations (12 hrs Soc)	3
Math 310 Statistics or Psy 311 Statistics or equivalent (write in)	3
Remaining Hours may be upper or lower division Sociology electives (write in) (.....) (.....) (.....)	9

ADDITIONAL SUPPORTING AREA

OUTSIDE SOCIOLOGY MAJOR:

Minimum cr. hrs.

15

Foreign Language

(write in) 10

For Additional Information Contact:

Prof. Conrad Gubera

Office: Library 014

Phone: 264

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE SOCIOLGY

MAJOR CODE 61

1st Semester	FRESHMAN	2nd Semester	Hours
Course	Hours	Course	
Soc 110 Intro to Sociology	3	Soc 152 Anthropology	3
Eng 101 Composition	3	Eng 102 Composition (Eng 100 or 101)	3
Hist 110 or Hist 120 U.S. History	3	Pol Sci 120 U.S., State & Local Govt.	3
HPER 160 Personal Health	2	Speech [Sp. 100, 131, or 302]	3
Fine Arts	3	Biology [Bio 101 or 121]	4
Psy 120 Freshman Orientation	1		16
	15		

() Prerequisites

[] Dept Recommendations

GENERAL EDUCATION (46)	
English Composition 101	3
English Composition 102	3
Speech	3
Check One:	
Speech 100 Speech Techniques	
Speech 131 Voice and Articulation	
Speech 302 Business and Professional	
Mathematics 110 or above	3
(If above, write in:)	
HPER 101 PE Activity	2
HPER 160 Personal Health or equiv	2
Literature, any level qualified	3
(write in)	
Fine Arts	6
Check Two:	
Art	
Drama	
Literature	
Music	
Philosophy or Ethics	
(write in)	
Foreign Language—beyond degree requirements of 10 hrs.	
Biology [suggest Bio 121]	4
Physical Science, Chemistry, Geology, or Physics	5
(write in)	
U.S. History 110 or 120	3
Political Science 120	3
Behavioral and Social Sciences	3
Check One:	
Psychology, General	
Economics, 201 or 202	
History	
Political Science	
Geography	
Elective Outside Major Area	3
Lower or Upper Divison	
(write in)	

SOCIOLOGY (39)	
The following must not duplicate the General Education Requirements.	
Soc 110 Introduction to Soc	3
Soc 152 Anthropology	3
Soc 311 Social Stratification (Soc 110)	3
Soc 362 Social Deviance	3
Soc 421 Sociological Theory (9 hrs. Soc.)	3
Soc 432 Sociological Investigations (12 hrs)	3
Sociology Electives	21
Comp 100, Intro to Data Processing	3
Comp 120, Intro to Programming	3
Econ 201, Principles of Econ (Macro)	3
Geography 211, 311, or 322	3
Psy 311 or Math 310 Statistics	3

ADDITIONAL SUPPLEMENTARY AREA OUTSIDE SOCIOLOGY MAJOR:
Minimum cr. hrs. 15

For Additional Information Contact:
Professor Conrad Gubera
Office: Library 014
Phone: 264

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
SOCIAL SCIENCE MAJOR
History Emphasis**

MAJOR CODE 30

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Hist 110 U.S. History	3	Hist 120 U.S. History	3
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Psy 110 Psy of Human Development	5	Gen Ed [Speech]	3
Gen Ed [Math]	3	Gen Ed [Bio Science]	4
Gen Ed [HPER]	2	Gen Ed [Lit or Fine Arts]	3
Psy 120 Freshman Orientation	1		16
	17		
() Prerequisites		[] Dept Recommendations	
GENERAL EDUCATION (46)		HISTORY (49)	
Eng 101 Composition	3	The following must not be duplicate courses used for General Education requirements.	
Eng 102 Composition (Eng 111 satisfies Eng 101 & 102)	3	Hist 110 or 120 U.S. History (both)	3
Speech	3	Hist 200 Western Civilization	3
Sp 100 Speech Techniques		Hist 205 or 210 Modern Europe	3
Sp 131 Voice and Articulation		Econ 201 Principles of Econ	
Sp 302 Business and Professional		(Macro)	3
Mathematics 110 or above (write in)	3	Pol Sci elective (write in)	3
HPER 101 PE Activity	2	Geography elective (write in)	3
HPER 160 Personal Health or equiv	2	Geography elective (write in)	3
Literature—any level qualified	3	Sociology elective (write in)	3
Fine Arts	6	Social Science elective (write in)	7
Check two:		Upper Division U.S. History (write in)	6
Art		Upper Division European History (write in)	6
Drama		Upper Divison History (write in)	6
Foreign Language (beyond degree requirement)			
Literature			
Music			
Philosophy			
(write in)			
Biological Science	4		
Physical Science	5		
Hist 110 or 120 (Both required)	3		
PSc 120 U.S. State & Local Govt	3		
Behavioral and Social Sciences	3		
Check one:			
Psychology		EDUCATION (25)	
Sociology		Educ 200 Exploratory Field Experiences (to be taken between semester of sophomore year)	1
Economics		Psy 302 Exceptional Child	2
History		Psy 310 Educ Psychology	3
Political Science		Educ 330 Struct of Teaching—Secondary	2
Geography		Educ 331 Video Teaching Lab.—Secondary	1
(write in)			
Elective outside major area	3		
(write in)			

For Additional Information Contact:
Dr. Tom L. Holman
Office: Library 013
Phone: 247

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
SOCIAL SCIENCE MAJOR
Political Science Emphasis
Suggested Order of Study**

MAJOR CODE 30

1st Semester		2nd Semester	
Course	Hours	Course	Hours
PSc 120 U.S. State & Local Govt	3	Hist 110 U.S. History	3
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Psy 110 Psychology of Human Devel	5	Gen Ed [Speech]	3
Gen Ed [Math]	3	Gen Ed [Bio Sci]	4
Gen Ed [HPER]	2	Gen Ed [Lit or Fine Arts]	3
Psy 120 Freshman Orientation	<u>1</u>		<u>16</u>
	<u>17</u>		

() Prerequisites

[] Dept Recommendations

GENERAL EDUCATION (46)	
Eng 101 Composition	3
Eng 102 Composition	3
(Eng 111 satisfies Eng 101 & 102)	
Speech	3
Sp 100 Speech Techniques	
Sp 131 Voice and Articulation	
Sp 302 Business and Professional	
Mathematics 110 or above	3
(write in)	
HPER 101 PE Activity	2
HPER 160 Personal Health or equiv	2
Literature—any level qualified	3
Fine Arts	6
Check Two:	
Art	
Theatre	
Foreign Language (beyond degree requirement)	
Literature	
Music	
Philosophy	
(write in)	
Biological Science	4
Physical Science	5
Hist 110 or 120 (Both required)	3
PSc 120 U.S. State & Local Govt	3
Behavioral and Social Science	3
Check One:	
Psychology	
Sociology	
Economics	
History	
Political Science	
Geography	
(write in)	
Elective outside major area	3
(write in)	

POLITICAL SCIENCE (48)	
The following must not duplicate courses used for General Education requirements.	
Hist 110 or 120	3
Hist 200 Western Civilization	3
Hist 205 or 210	3
Upper division European Hist	3
(write in)	
Upper division U.S. Hist	3
(write in)	
Econ 201	3
Geography elective	3
(write in)	
Sociology elective	3
Upper division Pol Sci	
(write in)	3

EDUCATION	
Ed 200 Exploratory Field Exper	
(to be taken between semester of sophomore year)	
Psy 110 Psy of Human Devel	1
Psy 302 Exceptional Child	5
Ed 330 Struct of Teach Sec	2
Ed 331 Video Teach Lab Sec	2
Ed 310 Educational Psychology	1
Professional Semester	3
	3
	2
	1
	3

For Additional Information Contact:
 Ms. Annetta St. Clair
 Office: L-12C
 Phone: 247
 OR
 Prof. Ray Minkler
 Office: L-129
 Phone: 264

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
SOCIAL SCIENCE MAJOR
Sociology Emphasis
Suggested Order of Study**

MAJOR CODE 30

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours

Course	Hours	Course	Hours
Eng 101 Composition	3	Eng 102 Composition	3
Pol Sci 120 U.S. State & Local Govt	3	Hist 120 U.S. History	3
History 110 U.S. History	3	Psy 110 Psy of Human Development	5
Math 110 Col Math or equiv	3	History 200 Western Civ to 1500	3
HPER 101 PE Activity	2	Gen Ed [Fine Arts]	3
Psy 120 Freshman Orientation	1		
	<u>15</u>		<u>17</u>

() Prerequisites

[] Dept Recommendations

GENERAL EDUCATION

English Composition 101	3
English Composition 102	3
Speech	3
Check One:	
Sp 100 Techniques	
Sp 131 Voice and Articulation	
Sp 302 Business and Professional	
Mathematics 110 or above	3
(If above, write in)	
PE Activity 101	2
Personal Health 160 or equivalent	2
Literature, any level qualified	3
(write in)	
Fine Arts	6
Check two:	
Art	
Drama	
Literature	
Music	
Philosophy or Ethics	
(write in)	
Foreign Language	
Biology [Suggest Bio 121]	4
Physical Science, Chemistry	
Geology, or Physics	5
(write in)	
U.S. History 110 or 120	
(Both required)	3
Political Science 120	3
Elective outside major area	3
Lower or Upper Division	
(write in)	

SOCIOLOGY: PLAN B (54 hrs)

Sociology 110	3
Sociology 321 (6 hrs Socio)	3
Sociology Electives	18
9 hrs must be upper division; write in:	
.....	
.....	
.....	
.....	
U.S. History 110 or 120 (Both required)	3
Western Civilization 200	3
Modern Europe 205 or 270 (write in)	3
Upper division U.S. History Elective (write in)	3
Upper division European History Elective (write in)	3
Political Science 120	3
Economics 201	3
Geography 211	3
Geography Elective (write in)	3

EDUCATIONAL REQUIREMENTS (27 hrs)

Psy 110 Human Growth and Development	5
Educ 200 Exploratory Field Experience	1
Psy 302 Exceptional Child	2
Psy 310 Educational Psychology	3
Educ 330 Structures of Teaching Soc Sci	2
Educ 331 Video Teaching Lab	1
Professional Semester	16

For Additional Information Contact:

Professor David Tate

Office: Library 014

Phone: 264

SUGGESTED ORDER OF STUDY

**BACHELOR OF ARTS
SPANISH**
Suggested Order of Study

MAJOR CODE 48

1st Semester		FRESHMAN	
Course	Hours	Course	Hours
Span 101 Beginning Spanish	5	Span 102 Beginning Spanish (Span 101)	5
English 101 Composition [Hist 110 or 120 U.S. History]	3	English 102 Composition (Eng 101) [Polsc 120 U.S. State, Local Govt.]	3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Bio 101]	4
HPER 101 PE Activity	2	HPER 160 Personal Health or equiv	2
Psy 120 Freshman Orientation	1		
	<u>17</u>		<u>17</u>

SOPHOMORE

Span 201 Intermediate Readings and Conversation	3	Span 202 Intro. Span. Lit (Span 201)	3
Gen Ed [Phys 100]	5	Gen Ed [Speech]	3
Gen Ed [Lit or Fine Arts]	3	Gen Ed [Lit or Fine Arts]	3
Gen Ed [Behav Sci]	3	Gen Ed Elective	3
Elective [Minor Area]	3	Elective [Minor Area]	3
	<u>17</u>		<u>15</u>

Required courses for Spanish major:

- Span 101, 102 Beginning Spanish
- 201 Intermediate Readings and Conversation
- 202 Intro to Spanish Literature (Span 201)
- * 301 Spanish Composition (Span 202)
- ** 302 Advanced Spanish Composition (Span 301)
- * 321 Survey of Spanish Literature (Span 202)
- ** 322 Survey of Spanish Literature (Span 202)
- * 332 Intro to Spanish American Literature (Span 301, 302)
- *+ 421 Nineteenth Century Spanish Novel (Span 322)
- ** 431 Don Quixote (Span 321)
- *++ 434 The Spanish American Novel (20 hours Spanish)

*Offered Fall Semester only

**Offered Spring Semester only

+Offered odd years only

++Offered even years only

() Prerequisite

[] Dept Recommendation

For Additional Information Contact:
Mr. Francisco Colon
Office: Library 4 (rear basement)
Phone: 264

SUGGESTED ORDER OF STUDY

BACHELOR OF SCIENCE IN EDUCATION

MAJOR CODE 25

SPANISH Plan B-Single Teaching Field Suggested Order of Study

1st Semester

FRESHMAN

2nd Semester

Course	Hours	Course	Hours
Span 101 Beginning Spanish	5	Span 102 Beginning Spanish (Span 101)	5
English 101 Composition	3	English 102 Composition (Eng 101)	3
Psy 110 Psy of Human Development	5	Gen Ed [Bio 101]	4
Gen Ed [Hist 110 or 120]	1	Gen Ed [Psc 120]	3
	17	HPER 101 Physical Activity	2

SOPHOMORE

Span 201 Intermediate Reading and Conversation	3	Span 202 Intro to Span Lit (Span 201)	3
Gen Ed [Math 110 or equiv]	3	Psy 310 Ed Psy	3
Gen Ed [Literature]	3	Gen Ed [Phys 100 or equiv]	5
Gen Ed [Speech]	3	HPER 160 Personal Health or equiv	2
Elective	3	Gen Ed [Lit or Fine Arts]	3
	15		16

Required Courses for Spanish Major:

- 201 Intermediate Readings and Conversation
- 202 Intro to Spanish Literature (Span 201)
- * 301 Spanish Composition (Span 202)
- ** 302 Advanced Spanish Composition (Span 301)
- * 321 Survey of Spanish Literature (Span 202)
- ** 322 Survey of Spanish Literature (Span 202)
- * 332 Intro to Spanish American Literature (Span 301, 302)
- ++ 421 Nineteenth Century Spanish Novel (Span 322)
- ** 431 Don Quixote (Span 321)
- +++ 434 The Spanish American Novel (20 hours Spanish)

*Offered Fall Semester only

**Offered Spring Semester only

+Offered odd years only

++Offered even years only

Spanish Education majors are encouraged to follow Plan A and select a second teaching field.

Plan A—Spanish as one of two teaching fields requires:

Span 101-102, 201, 202, 301, 303 and one course selected from 321, 322, or 332.

Students with a strong background in Spanish may arrange for a test for credit in beginning Spanish with Mr. Colon.

() Prerequisite

[] Dept Recommendation

For Additional Information Contact:
Mr. Francisco Colon
Office: Library 4 (rear basement)
Phone: 264

SUGGESTED ORDER OF STUDY

MAJOR CODE 47

BACHELOR OF ARTS
SPEECH AND THEATRE MAJOR—SPEECH EMPHASIS
Suggested Order of Study

1st Semester	FRESHMAN	2nd Semester	
Course		Course	
Spch 131 Voice & Articulation	3	Spch 102 Public Speaking (Spch 100)	3
Spch 121 Forensics Workshop	1-2	Spch 122 Forensics Workshop	1-2
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Gen Ed [Hist 110 or 120]	3	Gen Ed [Bio 101 Gen Bio or equiv]	4
HPER 101 Phys Activities	2	Gen Ed [Behav Science]	3
Spch 100 [Speech Techniques]	3	Gen Ed [HPER 102]	2
Psy 120 Freshman Orientation	1		
	16-17		16-17
SOPHOMORE			
Spch 213 Argu and Debate	3	Spch 212 Oral Interpretation	3
Spch 221 Forensics Workshop	1-2	Spch 222 Forensics Workshop	1-2
Eng 271 English Literature	3	Elective	3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Physc 100 Intro to]	5
Gen Ed [Art 110 or Music 110]	3	Eng 272 English Literature	3
Gen Ed [Polsc 120-U.S. State Local]	3		
	16-17		15-16
JUNIOR			
Spch 210 Discuss. Techniques	3	Sp 302 Business & Prof. Speech	3
TH 331 Hist of Theatre	3	TH 332 Hist of Theatre	3
Foreign Language	5	Foreign Language	5
Electives	4	Electives	4
	15		15
SENIOR			
Sp 300 Speech Analysis	3	Sp 311 History and Criticism of	
TH 351 Play Production	3	Modern Public Address	3
Electives	9	Sp 498 Seminar	3
	15	Electives	9
—Apply for graduation 100 Hearnes Hall			

() Prerequisite

[] Dept Recommendation

For Additional Information Contact:
Dr. Harry Zuger
Office: 314 Hearnes Hall
Phone: 235

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
SPEECH AND THEATRE—SPEECH EMPHASIS
Plan B-Single Teaching Field
Suggested Order of Study**

MAJOR CODE 31

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Spch 131 Voice and Articulation	3	+**Spch 102 Public Speaking (Sp 100)	3
Spch 121 Forensics Workshop	1-2	Spch 122 Forensics Workshop	1-2
Eng 101 Composition	3	Eng 102 Composition (Eng 101)	3
Gen Ed [Hist 110 or 120]	3	Psy 110 Psych of Human Develop	5
HPER 101 Phys Activities	2	Gen Ed [Bio 101 or equiv]	4
Psy 120 Freshman Orientation	1		
Spch 100 (Speech Techniques)	3		
	16-17		16-17
SOPHOMORE			
Spch 213 Argumentation and Debate	3	**Spch 212 Oral Interpretation	3
Spch 221 Forensics Workshop	1-2	Spch 222 Forensics Workshop	1-2
Eng 271 English Literature	3	Psy 310 Educ Psych (Psy 100)	3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Physc 100]	5
Gen Ed [Art 110 or Music 110]	3	Eng 272 English Literature	3
Gen Ed [Polsc 120]	3	Educ 200 Exploratory Field Experiment	1
	16-17		16-17
JUNIOR			
*Spch 210 Discussion Tech	3	Spch 302 Business and Prof Speech	3
Spch 321 Forensic Workshop	1-2	Spch 322 Forensic Workshop	1-2
Th 331 Hist of Theatre	3	Jour 111 News Writing	3
Psy 302 Exceptional Child (Psy 110)	2	Gen Ed [HPER 160 or equiv]	2
Elective [Literature]	3	Th 322 Hist of Theatre	3
	12-13	Ed 330 Structure of Teaching	2
		Ed 331 Video Teaching Lab	1
			15-16
SENIOR			
+**Spch 300 Spch Analysis	3	Professional Education Sem	16
Spch 498 Seminar	3	Register for National Teacher	
Spch 421 Forensic Workshop	1-2	Examination-226 Ed-Psy Bldg	
Eng 319 Composition for Teachers	3		
Ed 422 Teaching Reading in Sec	2		
Th 351 Play Production	3	() Prerequisites	
	15-16	[] Dept Recommendation	

—Apply for graduation 100 Hearnes Hall

Plan A (Teaching two subjects) follows the above excluding Spch 300, and 1 credit hour for Forensic Workshop.
All electives recommended in English

*Offered in Fall only

**Offered in Spring only

+Offered in Odd years only

++Offered in Even years only

For Additional Information Contact:
Dr. Harry Zuger
Office: 314 Hearnes Hall
Phone: 235

SUGGESTED ORDER OF STUDY

**BACHELOR OF ARTS
THEATRE**
Suggested Order to Study

MAJOR CODE 47

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Th 121 or 211 Th Lab	2	Th 122 or 222 (Lab)	2
Gen Ed [Th 110 Theatre Appre]	3	Sp 212 Oral Interpretation	3
Gen Ed [Sp 100 or Sp 131]	3	Gen Ed [Biol Sci]	4
Gen Ed [Eng 101 Comp]	3	Gen Ed [Eng 102 Comp]	3
Gen Ed [Hist 110 or 120]	3	Gen Ed [Pol Sci 120 U.S. State	
Gen Ed [HPER 101 or equiv]	2	Local Govt]	3
Psy 120 Freshman Orientation	1	Gen Ed [HPER 160 Health]	2
	17		17
SOPHOMORE			
Th 241 Act I or Th 341 Act II	3	Th 231, 232, 233, Th Pract	3
(Elect) [Th 221 or 121 Lab]	2	Th 142 Theatre Tech	3
Gen Ed [Foreign Language]	5	Gen Ed [Foreign Language]	5
Gen Ed [Math 110 or equiv]	3	Gen Ed [Phys Sci]	5
Gen Ed [Psy 100 Gen Psy]	3		16
	16		
JUNIOR			
Th 351 Play Prod	3	Th 322 Lab (Elective)	2
Th 241 Act I or Th 341 Act II	3	Th 362 Stage Costume	3
Th 441 Stage Design (Th 142)	3	Th 372 Directing for Stage	3
Th 321 Lab (Elective)	2	Art 302 Art Hist	3
Hist 200 Western Civilization	3	Eng Literature (Elective)	3
Art 100 Comp	3		14
	17		
SENIOR			
The 331 Hist of Theatre	3	Th 332 Hist of Theatre	3
Th 341 Creative Drama	3	Th 442 Acting III (Th 341)	3
(Elect) [Bus 101 Intro to Bus Accounting		(Elect) [Th 122 or 221 Lab]	2
101 or Econ 201]	3	(Elect) [Eng 451 Shakespeare]	3
(Elect) [Eng 450 Shakespeare or		(Elect) [Accounting 102 or Econ 202	
Eng 360 20th Cen Drama]	3	or Bus 101]	3
Electives	3		14
	15		

—Apply for graduation 100 Hearnes Hall

Additional recommended electives:
Sp 210 Discussion Tech., Jour 241
Radio TV News Writing.

() Prerequisites
[] Dept Recommendation

For Additional Information Contact: Mr. Milton W. Brietzke Office: AU 243 Phone: 248

SUGGESTED ORDER OF STUDY

**BACHELOR OF SCIENCE IN EDUCATION
SPEECH AND THEATRE
THEATRE EMPHASIS**
Plan B-Single Teaching Field
Suggested Order of Study

MAJOR CODE 31

1st Semester	FRESHMAN	2nd Semester	
Course	Hours	Course	Hours
Th 121 or 221 Theatre Lab	3	Th 122 or 222 Theatre Lab	3
Gen Ed [Th 110 Theatre Apprec]	2	Gen Ed [Eng 102 Comp]	3
Gen Ed [Eng 101 Comp]	3	Gen Ed [Bio 101 or equiv]	4
Gen Ed [Sp 100 Sp Tech or Sp 131 V. Art]	3	Psy 110 Psy of Human Devel	5
Gen Ed [Hist 112 or 120]	3	Sp 212 Oral Interp	.3
Gen Ed [HPER 101 or equiv]	2		
Psy 120 Freshman Orientation	1		
	<u>17</u>		<u>18</u>
SOPHOMORE			
Th 241 Acting I or Th 341 Act II	3	Th 231, 232, 233 Th Pract	3
Sp 101 Arg & Debate	3	Th 142 Theatre Technology	3
Gen Ed [Math 110 or equiv]	3	Gen Ed [Phys 100 Fund Phys Sci or equiv]	5
Gen Ed [Pol Sci 120 120 U.S. State and Local Govt]	3	Psy 310 Educ Psychology	3
Gen Ed [HPER 160 Pers Health]	2	Gen Ed [Eng 271 or 272 Eng Lit]	3
Gen Ed [Eng 180 or 182 Mast World Lit]	3		
	<u>17</u>		<u>17</u>



SUGGESTED ORDER OF STUDY

JUNIOR			
Th 351 Play Production	3	Th 362 Stage Costume	3
Th 331 Hist of Theatre	3	Th 332 Hist of Theatre	3
Th 341 Act II or Th 241 Act I	3	Th 372 Directing	3
Th 441 Stage Design (Th 142)	3	Eng 315 Exposition (Elective)	3
Th 321 Theatre Lab (Elective)	2	Ed 330 Structures of Teaching	2
	14	Ed 331 Video Teaching Lab	1
			15

SENIOR			
Sp 498 Studies in Disc or Disc Tech	3	Prof. Educ. Sem.	16
Psy 302 Exceptional Child	2		16
Th 121 or 221 Theatre Lab (elect)	2		
Electives (See Below)	6		
	13		

—Apply for graduation 100 Hearnes Hall

() Prerequisite

[] Dept Recommendation

Electives recommended in Art, Business,
Music, History, Lit or Theatre

For Plan A (two teaching fields) follow the
above excluding Th 231, 362 and 441

For Additional Information Contact:
Mr. Milton W. Brietzke
Office: AU 243
Phone: 248

PRE-VETERINARY

Please see the outline of pre-professional courses listed on page 163.





